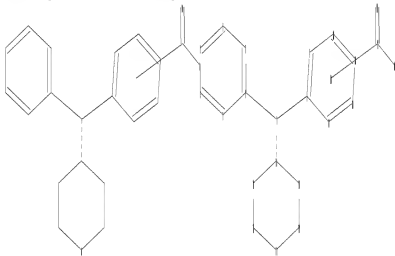


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chain nodes :
7 20
ring nodes :
1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19
ring/chain nodes :
21 22
chain bonds :
6-7 7-8 7-14 20-22 20-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13 14-15 14-19
15-16 16-17 17-18 18-19
exact/norm bonds :
7-14 14-15 14-19 15-16 16-17 17-18 18-19 20-22 20-21
exact bonds :
6-7 7-8
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13
isolated ring systems :
containing 1 : 8 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:CLASS 21:CLASS
22:CLASS 23:Atom

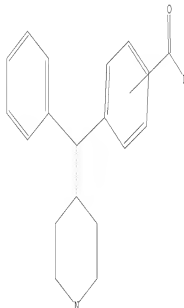
L7 STRUCTURE UPLOADED

=> que L7

Print selected from 10541656.trn

L8 QUE L7

=> d 17
L7 HAS NO ANSWERS
L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17
SAMPLE SEARCH INITIATED 14:43:46 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 972 TO ITERATE

100.0% PROCESSED 972 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 17570 TO 21310
PROJECTED ANSWERS: 624 TO 1496

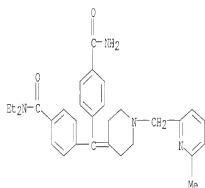
L9 50 SEA SSS SW L7

=> d scan

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Benzamide, 4-[(4-aminocarbonyl)phenyl][1-[(6-methyl-2-pyridinyl)methyl]-4-
piperidinylidene]methyl-N,N-diethyl-, trifluoroacetate (16:17) (9CI)
MF C31 H36 N4 O2 . 17/10 C2 H F3 O2

Print selected from 10541656.trn

CM 1

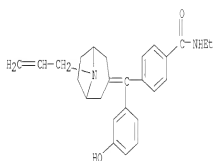


CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Benzamide, N-ethyl-4-[(3-hydroxyphenyl)[8-(2-propenyl)-8-
arabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI)
MF C26 H30 N2 O2

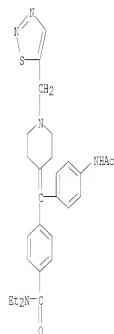


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Print selected from 10541656.trn

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Benzamide, 4-[[4-(acetylamino)phenyl][1-(1,2,3-thiadiazol-5-ylmethyl)-4-
piperidinylidene]methyl]-N,N-diethyl-
MF C28 H33 N5 O2 S



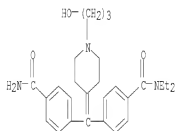
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(3-hydroxypropyl)-4-
piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:13) (salt)
[9CI]
MF C27 H35 N3 O3 . 13/10 C2 H F3 O2

CM 1

Print selected from 10541656.trn

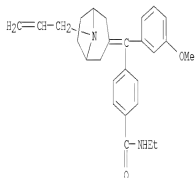


CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS ON STM
IN Benzamide, N-ethyl-4-[(3-methoxyphenyl)[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI)
MF C27 H32 N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

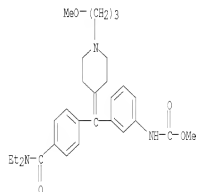
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS ON STM
IN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(3-methoxypropyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)

Page 5

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MF C29 H39 N3 O4
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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L2 0 S L1 AND PD<2003
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L4 STRUCTURE UPLOADED
L5 QUE L4
L6 50 S L4
L7 STRUCTURE UPLOADED
L8 QUE L7
L9 50 S L7

=> s 17 full
FULL SEARCH INITIATED 14:44:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 19438 TO ITERATE

100.0% PROCESSED 19438 ITERATIONS
SEARCH TIME: 00.00.01

930 ANSWERS

L10 930 SEA SSS FUL L7

=> file copies
FILE 'CASUS' ENTERED AT 14:44:20 ON 14 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STM CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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=> s l10
l11 39 l10

=> d cblb abs hitstr 1-39

L11 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
2007:299061 Document No. 146:350605 Quantitative Conformationally Sampled Pharmacophore for δ Opioid Ligands: Reevaluation of Hydrophobic Moieties Essential for Biological Activity. Bernard, Denzil; Coop, Andrew; MacKerell, Alexander D., Jr. (Department of Pharmaceutical Sciences, School of Pharmacy, University of Maryland Baltimore, Baltimore, MD, 21201, USA). Journal of Medicinal Chemistry, 50(8), 1799-1809 (English) 2007. CODEN: JMCNAR. ISSN: 0022-2623. Publisher: American Chemical Society.

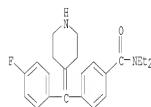
AB Recent studies have indicated several therapeutic applications for δ opioid agonists and antagonists. To exploit the therapeutic potential of δ opioids developing a structural basis for the activity of ligands at the δ opioid receptor is essential. The conformationally sampled pharmacophore (CSP) method (Bernard et al. J. Am. Chem. Soc. 2003, 125, 3103-3107) is extended here to obtain quant. models of δ opioid ligand efficacy and affinity. Quantification is performed via overlap integrals of the conformational space sampled by ligands with respect to a reference compound. Iterative refinement of the CSP model identified hydrophobic groups other than the traditional phenylalanine residues as important for efficacy and affinity in DSLET and ICI 174 864. The obtained models for a structurally diverse set of peptidic and nonpeptidic δ opioid ligands offer good predictions with R2 values >0.9, and the predicted efficacy for a set of test compds. was consistent with the expl. values.

IT 209807-40-9 209808-01-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOG (Biological study); USES (Uses)
Quant. Conformationally Sampled Pharmacophore for δ Opioid Ligands: Reevaluation of Hydrophobic Moieties Essential for Biol. Activity)

RN 209807-40-9 CAPLUS

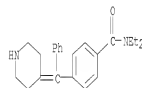
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CN Benzamide, N,N-diethyl-4-[(4-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209808-01-5 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)- (CA INDEX NAME)



L11 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
2006:898356 Document No. 145:449074 The novel, orally active, delta opioid RWJ-394674 is biotransformed to the potent mu opioid RWJ-413216. Codd, E. E.; Carson, J. R.; Colburn, R. W.; Dax, S. L.; Desai-Krieger, D.; Martinez, R. P.; McKown, L. A.; Neilson, L. A.; Patis, P. M.; Stahle, P. L.; Stone, D. J.; Streeter, A. J.; Wu, W. N.; Zhang, S. P. (Research and Early Development, Johnson and Johnson Pharmaceutical Research and Development, Spring House, PA, USA). Journal of Pharmacology and Experimental Therapeutics, 318(3), 1273-1279 (English) 2006. CODEN: JPETAB. ISSN: 0022-3565. Publisher: American Society for Pharmacology and Experimental Therapeutics.

AB Although the mu opioid receptor is the primary target of marketed opioid analgesics, several studies suggest the advantageous effect of combinations of mu and delta opioids. The novel compound RWJ-394674 [N,N-diethyl-4-[(8-phenethyl-8-azabicyclo[3.2.1]oct-3-ylidene)-phenylmethyl]-benzamide] bound with high affinity to the delta opioid receptor (6.2 nM) and with weaker affinity to the mu opioid receptor (72 nM). 5'-O-(3-[35S]-thio)triphosphate binding assay demonstrated its delta agonist function. Surprisingly given this pharmacol. profile, RWJ-394674 exhibited potent oral antinociception (ED50 = 10.5 μ mol/kg or 5 mg/kg) in the mouse hot-plate (48) test and produced a moderate Straub tail. Antagonist studies in the more stringent 55 hot-plate test demonstrated the antinociception produced by RWJ-394674 to be sensitive to the nonselective opioid antagonist naloxone as well as to the delta- and mu-selective antagonists, naltrindole and β -funtaltrexamine, resp. In vitro studies demonstrated that RWJ-394674 was metabolized by hepatic microsomes to its N-desethyl analog, RWJ-413216 [N-ethyl-4-[(8-phenethyl-8-

azabicyclo[3.2.1]oct-3-ylidene-phenylmethyl-benzamide], which, in contrast to RWJ-394674, had a high affinity for the mu rather than the delta opioid receptor and was an agonist at both. Pharmacokinetic studies in the rat revealed that oral administration of RWJ-394674 rapidly gave rise to detectable plasma levels of RWJ-413216, which reached levels equivalent to those of RWJ-394674 by 1 h. RWJ-413216 itself demonstrated a potent oral antinociceptive effect. Thus, RWJ-394674 is a delta opioid receptor agonist that appears to augment its antinociceptive effect through biotransformation to a novel mu opioid receptor-selective agonist.

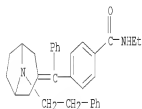
IT 359862-90-1, RWJ 413216

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); BIOL (Biological study)

(RWJ-394674 is biotransformed to RWJ-413216)

RN 359862-90-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[3-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



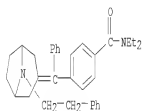
IT 359862-85-4, RWJ 394674

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(RWJ-394674 is biotransformed to RWJ-413216)

RN 359862-85-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[3-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



111 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2006:364076 Document No. 144:398335 Polymorph of N,N-diethyl-4-(3-fluorophenyl)piperidin-4-ylidenemethylbenzamide hydrochloride. Black, Simon Nicholas; Cook, Steve; Diorazio, Louis Joseph; Hulsizer, James; Moore, Gary; Quigley, Nathryn (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2006/041391; AI 2006/0420, 37 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, EM, EA, EG, ES, FI, GB, GR, HU, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SI, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, BR, CA, CH, CN, CU, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, NL, HR, NE, NO, PT, SE, SM, TD, TG, TR. (English). CODE: PIXX02. APPLICATION: NO 2005-5613 2005/0105. PRIORITY: SE 2004-2485 2004/0103.

CN, CU, EC, ES, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, BR, CA, CH, CN, CU, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, NL, HR, NE, NO, PT, SE, SM, TD, TG, TR. (English). CODE: PIXX02. APPLICATION: NO 2005-561469 2005/005. PRIORITY: SE 2004-2485 2004/0103.

AB Polymorphs of N,N-diethyl-4-(3-fluorophenyl)piperidin-4-ylidenemethylbenzamide hydrochloride, methods of making these polymorphs, and uses thereof are described.

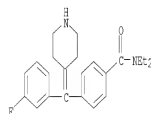
IT 209803-44-6P

RL: FEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(polymorph of diethyl(3-fluorophenyl)piperidin-4-ylidenemethyl)benzamide)

RN 209803-44-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-fluorophenyl)-4-piperidinylidenemethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

111 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2005:638946 Document No. 143:153235 Preparation of diarylmethylidenepiperidines for the management of pain. Brown, William; Griffin, Andrew; Walpole, Christopher (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2005/06128 A1 2005/0721, 56 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, EM, EA, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SI, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, BR, CA, CH, CN, CU, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, NL, HR, NE, NO, PT, SE, SM, TD, TG, TR. (English). CODE: PIXX02. APPLICATION: NO 2005-5613 2005/0105. PRIORITY: SE 2004-25 2004/0109.

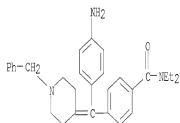
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I (R1 = (un)substituted aryl, heteroaryl; R2 = alkyl, H; R3 = H, CO₂R, SO₂R₄, etc.; R4 = H, alkyl, alkenyl, etc.) and their pharmaceutically acceptable salts were prepared. For example, N-acetylation of aniline II (R2 = H) with acetic anhydride afforded the TFA salt of diarylmethylidene-piperidine II (R2 = COCH₃) in 100% yield. In human δ receptor assays, certain examples of compds. I exhibited IC₅₀ values ranging from 0.22-2.34 nM, with an average of 0.98 nM (sic).

IT 859911-39-OP
 RU: PAC (Pharmacological activity); RCT (Reactant); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of diarylmethylidene-piperidines for the management of pain)

RM 859911-39-0 CAPLUS
 CN Benzamide, 4-[[4-(aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

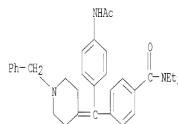


● HCl

IT 859911-40-3P, 4-[[4-(Acetylamino)phenyl][1-benzylpiperidin-4-ylidene]methyl]-N,N-diethylbenzamide 859911-41-4P
 859911-42-5E, 4-[[4-(Acetylamino)phenyl][1-(pyridin-2-ylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide
 859911-43-4P 859911-44-7P 859911-45-8P
 859911-46-9P 859911-47-0P 859911-48-1P,
 4-[[4-(Acetylamino)phenyl][1-(1,3-thiazol-4-ylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide 859911-49-2P
 859911-50-5E, 4-[[1-Benzylpiperidin-4-ylidene][4-[(methylsulfonyl)amino]phenyl]methyl]-N,N-diethylbenzamide
 859911-51-4P 859911-52-7P 859911-53-8P
 859911-54-9E, 4-[[4-(Acetylamino)phenyl][1-(2-fluorobenzyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide
 859911-55-0P 859911-56-1P 859911-57-2P
 859911-58-3P, 4-[[4-(aminophenyl)[1-benzylpiperidin-4-ylidene]methyl]-N,N-diethylbenzamide
 RU: PAC (Pharmacological activity); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene-piperidines for the management of pain)
 RM 859911-40-3 CAPLUS

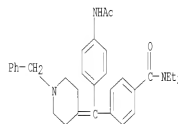
CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RM 859911-41-4 CAPLUS
 CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRM 859911-40-3
 CME C32 H37 N3 O2



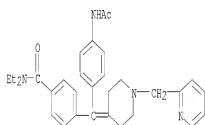
CM 2

CRM 76-05-1
 CME C2 H F3 O2



RM 859911-42-5 CAPLUS
 CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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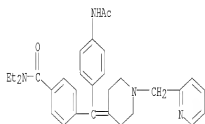
RN 859911-43-6 CASUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CEN 859911-42-5

CMF C31 H36 N4 O2



CM 2

CEN 76-05-1

CMF C2 H F3 O2

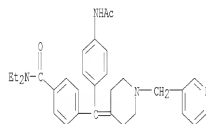


RN 859911-44-7 CASUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

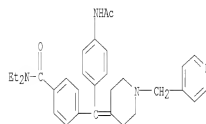
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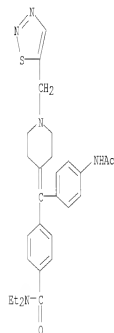
RN 859911-45-9 CASUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 859911-46-9 CASUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(1,2,3-thiadiazol-5-ylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

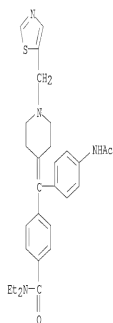


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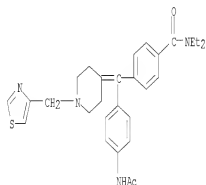
RN 859911-47-0 CAMELUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 859911-49-1 CAMELUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 859911-49-2 CAMELUS

CN Benzamide, 4-[[4-(acetylamino)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

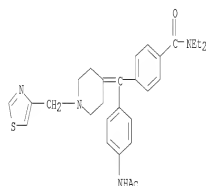
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Page 15

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CN 859911-48-1

CMP C29 H34 N4 O2 S



CN 2

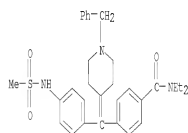
CN 76-05-1

CMP C2 H F3 O2



RN 859911-50-5 CAMELUS

CN Benzamide, N,N-diethyl-4-[[4-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 859911-51-6 CAMELUS

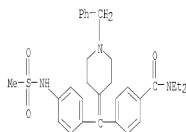
CN Benzamide, N,N-diethyl-4-[[4-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CN 1

Page 16

Print selected from 10541656.trn

CRN 859911-50-5
CMP C31 E37 N3 O3 S

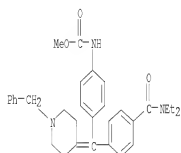


CM 2

CRN 76-05-1
CMP C2 H F3 O2



RN 859911-52-7 CAPLUS
CN Carbamic acid, [4-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



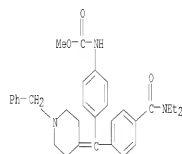
RN 859911-53-8 CAPLUS
CN Carbamic acid, [4-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

Page 17

Print selected from 10541656.trn

CRN 859911-52-7
CMP C32 E37 N3 O3

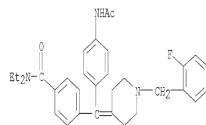


CM 2

CRN 76-05-1
CMP C2 H F3 O2



RN 859911-54-9 CAPLUS
CN Benzamide, 4-[[4-(acetylamino)phenyl][1-[(2-fluorophenyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 859911-55-0 CAPLUS
CN Benzamide, 4-[[4-(acetylamino)phenyl][1-[(2-fluorophenyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

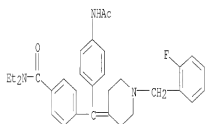
CM 1

CRN 859911-54-9

Page 18

Print selected from 10541656.trn

CMF C52 H56 F N3 O2



CM 2

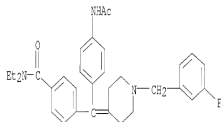
CRW 76-05-1

CMF C2 H F3 O2



RN 859911-56-1 CAPLUS

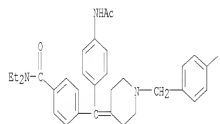
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RN 859911-57-2 CAPLUS

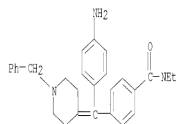
CN Benzamide, 4-[[4-(acetamino)phenyl][1-[(4-fluorophenyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541656.trn



RN 859911-58-3 CAPLUS

CN Benzamide, 4-[[4-(aminophenyl)[1-(phenylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



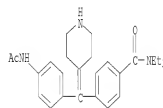
IT 859911-59-4P, 4-[[4-(Acetylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethylbenzamide 859911-60-7P 859911-61-8P

RL: RCT (Reactant); SFW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of diarylmethylidene piperidines for the management of pain)

RN 859911-59-4 CAPLUS

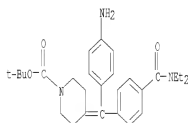
CN Benzamide, 4-[[4-(acetamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



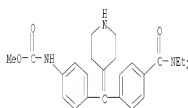
RN 859911-60-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(4-aminophenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Print selected from 10541636.trn



RN 859911-61-8 CAPJUS
CN Carbanic acid, [4-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 5 OF 39 CAPJUS COPYRIGHT 2008 ACS on STN
2005:638845 Document No. 143:153294 Preparation of
diarylmethylidenepiperidines for the management of pain. Brown, William;
Griffin, Andrew (Astrazera AB, Sweden). PCT Int. Appl. NO 2005/06127 A1
2005/0721, 67 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA,
BB, BG, BR, BW, BY, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC,
EE, EG, ES, FI, GB, GD, GE, GH, GN, HR, HU, IL, IN, IS, JP, KE, KG,
KP, KR, KS, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ,
NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TH, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; SW: AT,
BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE,
IS, IT, LU, MC, ML, MR, NE, NL, PT, PE, SE, SN, TD, TG, TR. (English).
CODEN: PIIKX2. APPLICATION: WO 2005-5812 20050105. PRIORITY: SE 2004-26
20040109.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

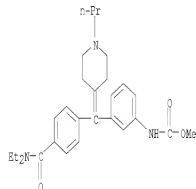
AB Title compds. I (R1, R3 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl,
cycloalkyl, etc.) and their pharmaceutically acceptable salts were prepared
for example, N-alkylation of piperidine II (R2 = H) with 1-iodopropane
afforded the RFA salt of diarylmethylidenepiperidine I (R2 = C2H5) in
54% yield. In human 5 receptor assays, certain examples of
compds. I exhibited IC50 values ranging from 0.18-3.7 nM, with an average of
0.56 nM (sic).

IT 859911-03-0P 859911-04-0P 859911-05-0P

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859911-06-1P 859911-07-2P 859911-08-3P
859911-09-4P 859911-10-7P 859911-11-8P
859911-12-9P 859911-13-0P 859911-14-1P
859911-15-2P 859911-16-3P 859911-17-4P
859911-18-5P 859911-19-6P 859911-20-9P
859911-21-0P 859911-22-1P 859911-23-2P
859911-24-3P 859911-25-4P 859911-26-5P
859911-27-6P 859911-28-7P 859911-29-8P
859911-30-1P 859911-31-2P 859911-32-3P
859911-33-4P 859911-34-5P 859911-35-6P,
[3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-
piperidinylidene]methyl]phenyl]carbanic acid methyl ester
RU: PNC (Pharmacological activity); SPN (Synthetic preparation); THW
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of diarylmethylidenepiperidines for the management of pain)

RN 859911-03-8 CAPJUS
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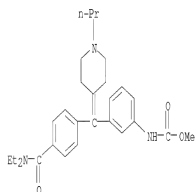


RN 859911-04-9 CAPJUS
CN Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-
piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate)
(9CI) (CA INDEX NAME)

CM 1

CN 859911-03-8
CM C28 H37 N3 O3

Print selected from 10541656.trn



CM 2

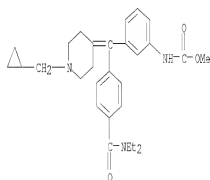
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-05-0 CAPLUS

CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-06-1 CAPLUS

CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

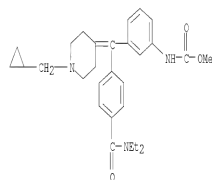
Page 23

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CM 1

CRN 859911-05-0

CMF C29 H37 N3 O3



CM 2

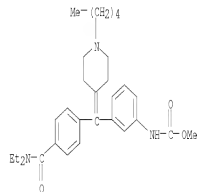
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-07-2 CAPLUS

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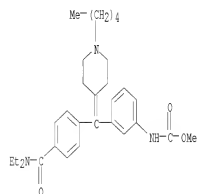
Page 24

Print selected from 10541656.trn

RN 859911-08-3 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-pentyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 859911-07-2
 CMF C30 H41 N3 O3



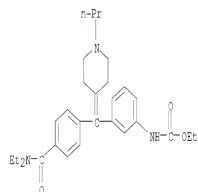
CM 2

CRM 76-05-1
 CMF C2 H F3 O2



RN 859911-09-4 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

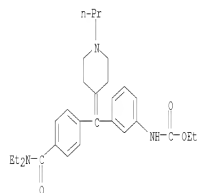
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RN 859911-10-7 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 859911-09-4
 CMF C29 H39 N3 O3



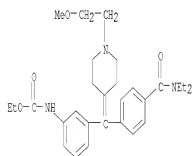
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CRM 76-05-1
 CMF C2 H F3 O2



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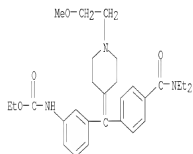
RN 859911-11-8 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 859911-12-9 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-11-8
 CMF C29 H39 N3 O4



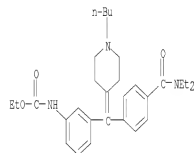
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CRN 76-05-1
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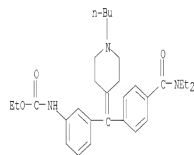
RN 859911-13-0 CAPLUS
 CN Carbamic acid, [3-[[1-butyl-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 859911-14-1 CAPLUS
 CN Carbamic acid, [3-[[1-butyl-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-13-0
 CMF C30 H41 N3 O5



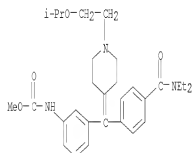
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CRN 76-05-1
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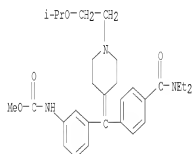
RN 859911-15-2 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-[2-(1-methylethoxy)ethyl]-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-16-3 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-[2-(1-methylethoxy)ethyl]-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-15-2
 CMF C30 H41 N3 O4



CM 2

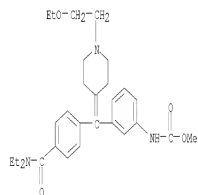
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 CMF C2 H F3 O2



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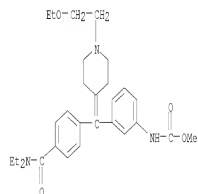
RN 859911-17-4 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-18-5 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-17-4
 CMF C29 H39 N3 O4



CM 2

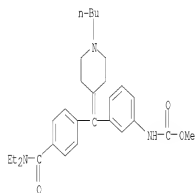
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 CMF C2 H F3 O2

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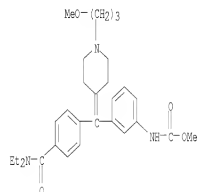
RN 859911-19-6 CAPLUS
CN Carbamic acid, [3-[(1-butyl-4-piperidinylidene)[4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

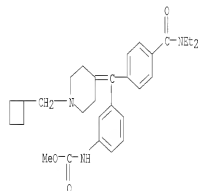
RN 859911-20-9 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(3-methoxypropyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Print selected from 10541656.trn



● HCl

RN 859911-21-0 CAPLUS
CN Carbamic acid, [3-[[1-(1-(cyclobutylmethyl)-4-piperidinylidene)[4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

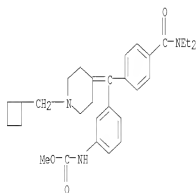


RN 859911-22-1 CAPLUS
CN Carbamic acid, [3-[[1-(1-(cyclobutylmethyl)-4-piperidinylidene)[4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CN 1

CRN 859911-21-0
CMF C30 H33 N3 O3

Print selected from 10541656.trn



CM 2

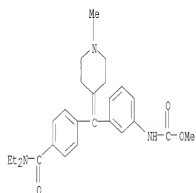
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-23-2 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-24-3 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

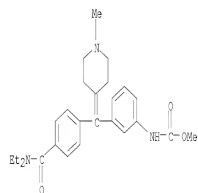
CM 1

Page 33

Print selected from 10541656.trn

CRN 859911-23-2

CMF C26 H33 N3 O3



CM 2

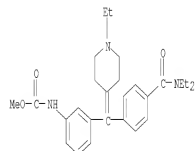
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-25-4 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-26-5 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate)

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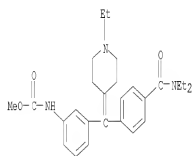
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(9CI) (CA INDEX NAME)

CM 1

CRN 859911-25-4

CMF C27 H35 N3 O3



CM 2

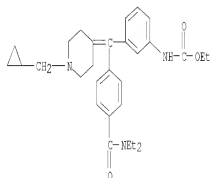
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-27-6 CAPLUS

CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-[(diethylamino)carbonyl]phenylmethyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



Print selected from 10541656.trn

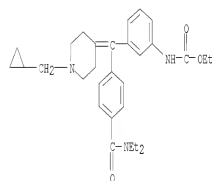
RN 859911-28-7 CAPLUS

CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-[(diethylamino)carbonyl]phenylmethyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-27-6

CMF C30 H39 N3 O3



CM 2

CRN 76-05-1

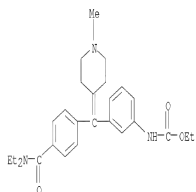
CMF C2 H F3 O2



RN 859911-29-8 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

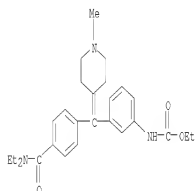
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RN 859911-10-1 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-29-8
CMP C27 H35 N3 O3



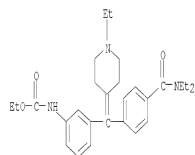
CM 2

CRN 76-05-1
CMP C2 H F3 O2



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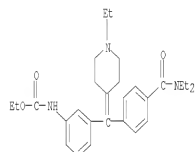
RN 859911-31-2 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 859911-32-3 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-31-2
CMP C28 H37 N3 O3



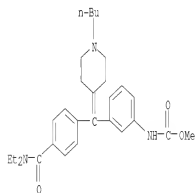
CM 2

CRN 76-05-1
CMP C2 H F3 O2



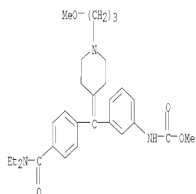
RN 859911-33-4 CAPLUS

CN Carbamic acid, 3-[[1-butyl-4-piperidinylidene]4-
[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA
INDEX NAME)



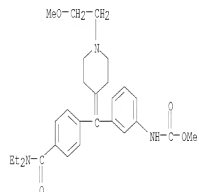
RN 859911-34-5 CAPLUS

CN Carbamic acid, 3-[[4-[(diethylamino)carbonyl]phenyl][1-(3-methoxypropyl)-
4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-35-6 CAPLUS

CN Carbamic acid, 3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-
piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



IT 725229-84-52, 4-[(3-Aminophenyl)[4-[(diethylamino)carbonyl]phenyl]
methylene]-1-piperidinecarboxylic acid 1,1-dimethylethyl ester

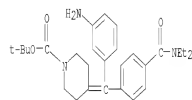
725229-85-62 859911-37-82 859911-38-32

RL: RCT (Reactant); SEM (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(preparation of diarylmethylidenepiperidines for the management of pain)

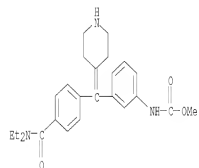
RN 725229-84-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(3-aminophenyl)[4-
[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA
INDEX NAME)



RN 725229-85-6 CAPLUS

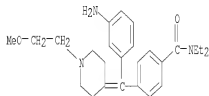
CN Carbamic acid, 3-[[4-[(diethylamino)carbonyl]phenyl]-4-
piperidinylidenemethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-37-8 CAPLUS

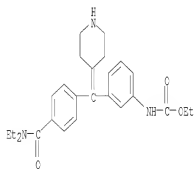
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CN Benzamide, 4-[(3-aminophenyl)[1-(2-methoxyethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 859911-38-9 CAPLUS

CN Ceramide acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl-, ethyl ester (9CI) (CA INDEX NAME)

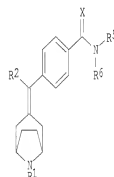


L11 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2005:15941 Document No. 142:113912 Preparation of 3-(diarylmethylene)-8-arabicyclo[3.2.1]octanes as δ - or μ -opioid receptor modulators.
Coats, Steven J.; Carson, John R.; Neilson, Lou Anne; Pittis, Philip M.; Schulz, Mark J. (USA). U.S. Pat. Appl. Publ. US 20050004163 A1 20050106, 42 pp., Cont.-in-part of U.S. Ser. No. 360,859, abandoned. (English).
CODEN: USIXXC. APPLICATION: US 2004-767712 20040129. PRIORITY: US 2000-186778P 20000303; US 2001-791246 20010222; US 2003-360859 20030207.

GI

Print selected from 10541656.trn



I

AB The title compds. [; R1 = H, alkyl, cycloalkylalkyl, heterocyclylalkyl, aralkyl, etc.; R2 = H, halo, CN, benzyloxy, etc.; X = O, S; R5-R6 = H, alkyl] and their pharmaceutically acceptable enantiomers, diastereoisomers and salts, were prepared. Thus, tropinone and N,N-diethyl-4-benzoylbenzamide (preparation given) in THF were added to a prerefluxed mixture of TiCl4 and Zn in

THF followed by 3 h reflux to give N,N-diethyl-4-[(8-methyl-8-arabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamide hydrochloride. The latter at 150 μ moles/kg orally in mice gave 87% inhibition of acetylcholine bromide-induced abdominal constriction. Depending on their agonist or antagonist effect, I are analgesics, immunosuppressants, antiinflammatory agents, neurol. and psychiatric drugs, medicaments for drug and alc. abuse, agents for treating gastritis and diarrhea, cardiovascular agents and agents for the treatment of respiratory diseases.

IT 360563-54-BP 360563-56-OP 360563-59-SP
360563-60-6P

RL: BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BICL (Biological study); PREP (Preparation); USUS (Uses)
(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

RN 360563-54-8 CAPLUS

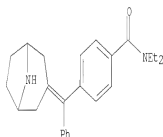
CN Benzamide, 4-(8-arabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, (+)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 360563-53-7

CMF C25 H30 N2 O

Print selected from 10541656.trn



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



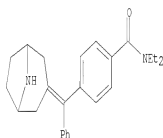
RN 360563-56-0 CAPLUS

CM Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, (-)-, (Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 360563-55-9

CMF C25 H30 N2 O



CM 2

CRN 110-17-8

CMF C4 H4 O4

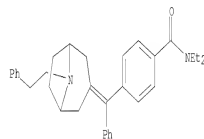
Double bond geometry as shown.

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RN 360563-59-3 CAPLUS

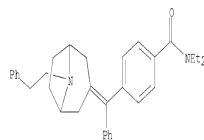
CM Benzamide, N,N-diethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride, (-)- (9CI) (CA INDEX NAME)



● HCl

RN 360563-60-6 CAPLUS

CM Benzamide, N,N-diethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride, (+)- (9CI) (CA INDEX NAME)



● HCl

IT 359863-14-2P 359863-16-4P 359863-18-6P

823812-97-1P

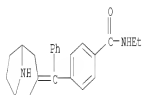
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); BACT (Reactant or reagent); USES (Uses)

(Preparation of diarylmethylenesazabicyclooctanes as δ - or μ -opioid receptor modulators)

RN 359863-14-2 CAPLUS

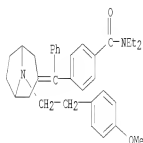
CM Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N-ethyl- (CA

INDEX NAME



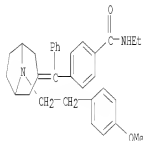
RN 359863-16-4 CAPLUS

CN Benzanide, N,N-diethyl-4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



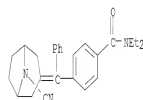
RN 359863-18-6 CAPLUS

CN Benzanide, N-ethyl-4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



RN 823812-97-1 CAPLUS

CN Benzanide, 4-[[8-cyano-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



IT 359862-70-7P 359862-71-8P 359862-72-9P
 359862-73-0P 359862-74-1P 359862-75-2P
 359862-76-3P 359862-77-4P 359862-78-5P
 359862-79-6P 359862-80-9P 359862-81-0P
 359862-82-1P 359862-83-2P 359862-84-3P
 359862-85-4P 359862-86-5P 359862-87-6P
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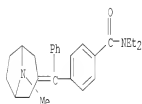
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EC: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USSS (Uses)

(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

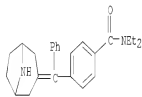
RN 359862-70-7 CAFLUS

CN Benzamide, N,N-diethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



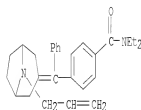
RN 359862-71-8 CAFLUS

CN Benzamide, 4-[8-azabicyclo[3.2.1]oct-3-ylidenophenylmethyl]-N,N-diethyl- (CA INDEX NAME)



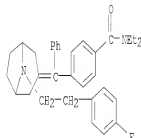
RN 359862-72-9 CAFLUS

CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



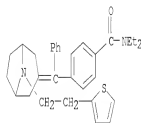
RN 359862-73-0 CAFLUS

CN Benzamide, N,N-diethyl-4-[(8-(2-(4-fluorophenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



RN 359862-74-1 CAFLUS

CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-(2-thienyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359862-75-2 CAFLUS

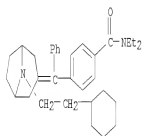
CN Benzamide, N,N-diethyl-4-[(8-(2-(1H-indol-3-yl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 359862-76-3 CAFLUS

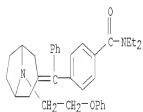
CN Benzamide, 4-[(8-(2-cyclohexylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541656.trn



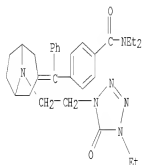
RN 359862-77-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-phenoxyethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



RN 359862-78-5 CAPLUS

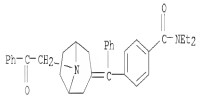
CN Benzamide, N,N-diethyl-4-[[8-[2-(4-ethyl-4,5-dihydro-5-oxo-1H-tetrazol-1-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



RN 359862-79-6 CAPLUS

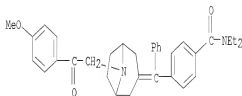
CN Benzamide, N,N-diethyl-4-[[8-(2-oxo-2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

Print selected from 10541656.trn



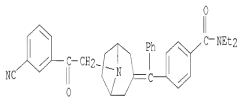
RN 359862-80-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-(4-methoxyphenyl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



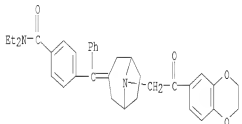
RN 359862-81-0 CAPLUS

CN Benzamide, 4-[[8-[2-(3-cyanophenyl)-2-oxoethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



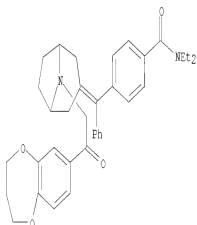
RN 359862-82-1 CAPLUS

CN Benzamide, 4-[[8-[2-(2-(3,4-dihydro-1,4-benzodioxin-6-yl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)

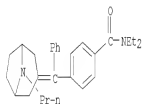


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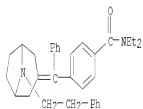
CN Benzamide, 4-[[8-[2-(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)-2-oxoethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



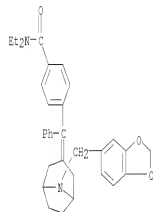
RN 359862-84-3 CAPLUS
CN Benzanide, N,N-diethyl-4-[[phenyl(8-propyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



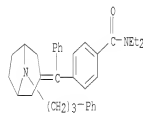
RN 359862-85-4 CAPLUS
CN Benzanide, N,N-diethyl-4-[[phenyl(8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



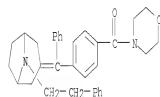
RN 359862-86-5 CAPLUS
CN Benzanide, 4-[[8-(1,3-benzodioxol-5-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



RN 359862-87-6 CAPLUS
CN Benzanide, N,N-diethyl-4-[[phenyl(8-(3-phenylpropyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359862-92-3 CAPLUS
CN Morpholine, 4-[[4-[[phenyl(8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzoyl]- (9CI) (CA INDEX NAME)

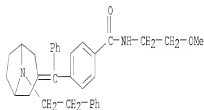


RN 359862-93-4 CAPLUS
CN Benzanide, N,N-bis(1-methylethyl)-4-[[phenyl(8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

Print selected from 10541656.trn

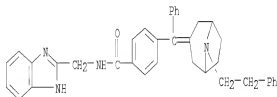
RN 359863-03-9 CAPLUS

CN Benzamide, N-(2-methoxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



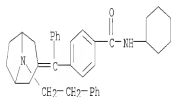
RN 359863-04-0 CAPLUS

CN Benzamide, N-[1H-benzimidazol-2-ylmethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-05-1 CAPLUS

CN Benzamide, N-cyclohexyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



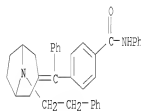
RN 359863-06-2 CAPLUS

CN Benzamide, N-phenyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



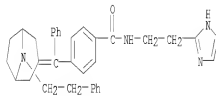
Page 55

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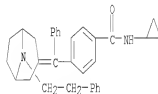
RN 359863-07-3 CAPLUS

CN Benzamide, N-[2-(1H-imidazol-2-yl)ethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



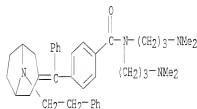
RN 359863-08-4 CAPLUS

CN Benzamide, N-cyclopropyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-09-5 CAPLUS

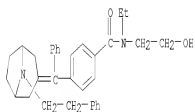
CN Benzamide, N,N-bis[3-(dimethylamino)propyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



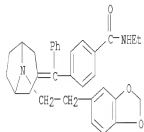
RN 359863-10-8 CAPLUS

CN Benzamide, N-ethyl-N-(2-hydroxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

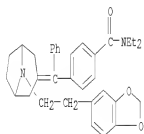
Page 56



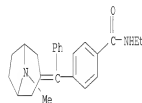
RN 359863-11-9 CAPLUS
CN Benzamide, 4-[[8-[[2-(1,3-benzodioxol-5-yl)ethyl]phenylmethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N-ethyl- (CA INDEX NAME)



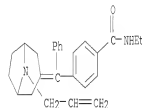
RN 359863-12-0 CAPLUS
CN Benzamide, 4-[[8-[[2-(1,3-benzodioxol-5-yl)ethyl]phenylmethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



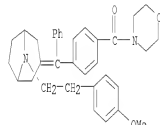
RN 359863-13-1 CAPLUS
CN Benzamide, N-ethyl-4-[[8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



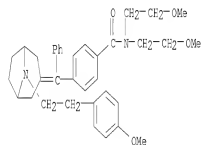
RN 359863-15-3 CAPLUS
CN Benzamide, N-ethyl-4-[[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



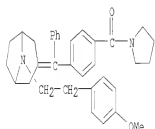
RN 359863-17-5 CAPLUS
CN Morpholine, 4-[[4-[[8-[[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]- (9CI) (CA INDEX NAME)



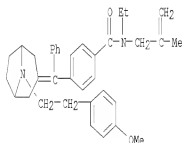
RN 359863-19-7 CAPLUS
CN Benzamide, N,N-bis(2-methoxyethyl)-4-[[8-[[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



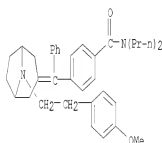
RN 359863-20-0 CASUS
CN Pyrrolidine, 1-[4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]- (9CI) (CA INDEX NAME)



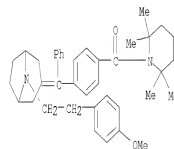
RN 359863-22-2 CASUS
CN Benzamide, N-ethyl-4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N-(2-methyl-2-propenyl)- (9CI) (CA INDEX NAME)



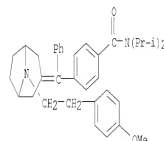
RN 359863-23-3 CASUS
CN Benzamide, 4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-dipropyl- (CA INDEX NAME)



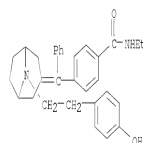
RN 359863-24-4 CASUS
CN Piperidine, 1-[4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



RN 359863-25-5 CASUS
CN Benzamide, 4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

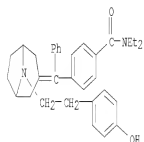


RN 359863-26-6 CASUS
CN Benzamide, N-ethyl-4-[[8-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

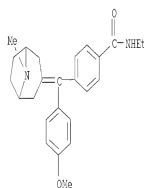


RN 359863-27-7 CASUS
CN Benzamide, N,N-diethyl-4-[[8-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

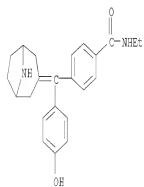
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RN 359863-28-8 CAPLUS
CN Benzanide, N-ethyl-4-[(4-methoxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

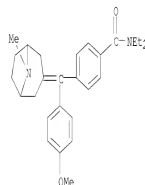


RN 359863-29-9 CAPLUS
CN Benzanide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

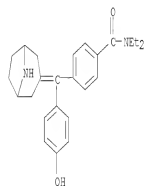


RN 359863-30-2 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-methoxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

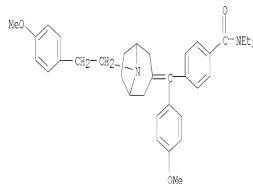
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RN 359863-31-3 CAPLUS
CN Benzanide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



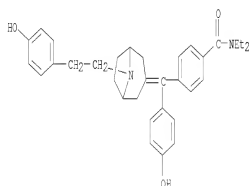
RN 359863-32-4 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-methoxyphenyl)(8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



Print selected from 10541656.trn

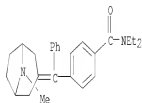
RN 359863-33-5 CAPLUS

CN Benzanide, N,N-diethyl-4-[(4-hydroxyphenyl)[8-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359863-34-6 CAPLUS

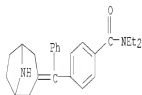
CN Benzanide, N,N-diethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 359863-35-7 CAPLUS

CN Benzanide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

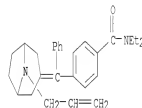


● HCl

Print selected from 10541656.trn

RN 359863-36-8 CAPLUS

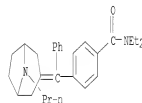
CN Benzanide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 359863-37-9 CAPLUS

CN Benzanide, N,N-diethyl-4-[phenyl[8-propyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

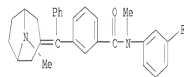
RN 359863-39-1 CAPLUS

CN Benzanide, N-[3-fluorophenyl]-N-methyl-3-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-, (ZE)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRM 359862-88-7

CMF C29 H29 F N2 O



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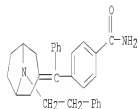
CM 2

CRN 110-17-8
CMP C4 H4 O4

Double bond geometry as shown.



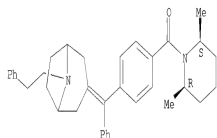
RN 359863-43-7 CAPLUS
CN Benamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 359863-44-8 CAPLUS
CN Piperidine, 2,6-dimethyl-1-[4-(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzoyl]-, (2R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

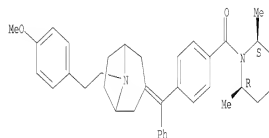


RN 359863-52-8 CAPLUS
CN Piperidine, 1-[4-[18-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]-2,6-dimethyl-, (2R,6S)-rel- (9CI) (CA INDEX NAME)

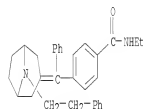
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Relative stereochemistry.



RN 359863-72-2 CAPLUS
CN Benamide, N-ethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

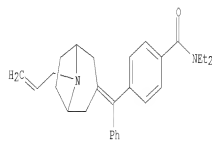


● HCl

RN 360563-58-2 CAPLUS
CN Benamide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, (-)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 360563-57-1
CMP C28 H34 N2 O



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CM 2

CRM 110-17-8

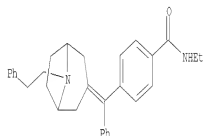
CMF C4 H4 O4

Double bond geometry as shown.



RN 360563-62-8 CAPLUS

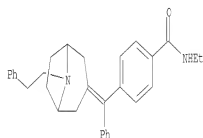
CM Benzamide, N-ethyl-4-[phenyl[3-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride, (-)- (9CI) (CA INDEX NAME)



• HCl

RN 360563-63-9 CAPLUS

CM Benzamide, N-ethyl-4-[phenyl[3-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride, (+)- (9CI) (CA INDEX NAME)



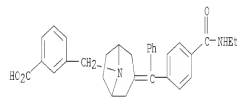
• HCl

RN 809275-33-0 CAPLUS

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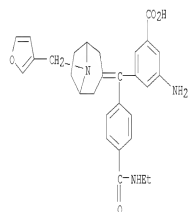
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CM Benzoic acid, 3-[[3-[[4-[(ethylamino)carbonyl]phenyl]phenylmethylene]-8-azabicyclo[3.2.1]oct-8-yl]methyl]- (CA INDEX NAME)



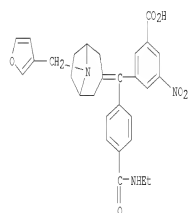
RN 809275-38-5 CAPLUS

CM Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-41-0 CAPLUS

CM Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)

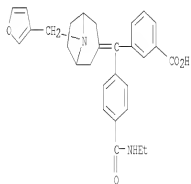


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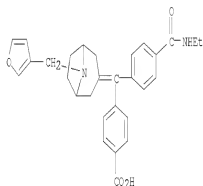
RN 809275-43-2 CASLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-44-3 CASLUS

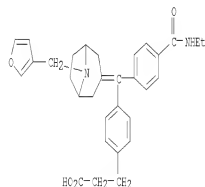
CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-45-4 CASLUS

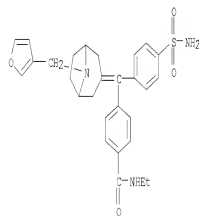
CN Benzenepropanoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

Print selected from 10541656.trn



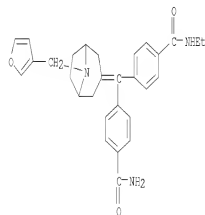
RN 809275-47-6 CASLUS

CN Benamide, 4-[[4-(aminosulfonyl)phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-55-6 CASLUS

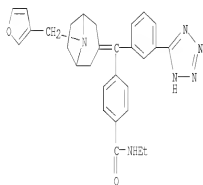
CN Benamide, 4-[[4-(aminocarbonyl)phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



Print selected from 10541636.trn

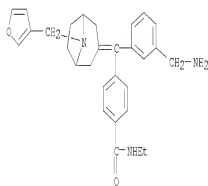
RN 809275-57-8 CAPLUS

CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-(1H-tetrazol-5-yl)phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 809275-59-0 CAPLUS

CN Benzanide, 4-[[[3-(aminomethyl)phenyl][8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

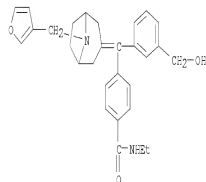


RN 809275-60-3 CAPLUS

CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-(hydroxymethyl)phenyl]methyl]- (CA INDEX NAME)

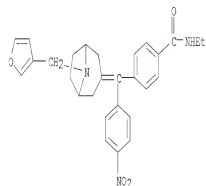


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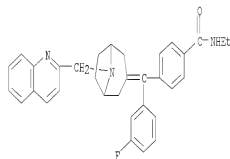
RN 809275-69-2 CAPLUS

CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][4-nitrophenyl]methyl]- (CA INDEX NAME)



RN 823810-95-3 CAPLUS

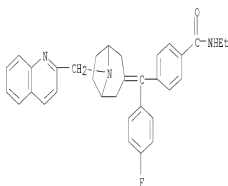
CN Benzanide, N-ethyl-4-[[3-(4-fluorophenyl)[8-(2-quinolinyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823810-98-6 CAPLUS

CN Benzanide, N-ethyl-4-[[4-(4-fluorophenyl)[8-(2-quinolinyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

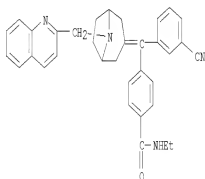




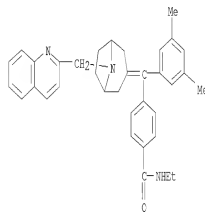
RN 823811-15-0 CAPLUS
 CN Benzamide, 4-[(2-aminophenyl)[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

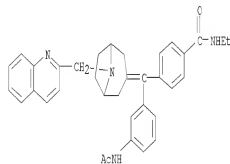
RN 823811-16-1 CAPLUS
 CN Benzamide, 4-[(3-cyanophenyl)[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



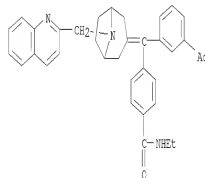
RN 823811-24-1 CAPLUS
 CN Benzamide, 4-[(3,5-dimethylphenyl)[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823811-53-6 CAPLUS
 CN Benzamide, 4-[(3-(acetylamino)phenyl)[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



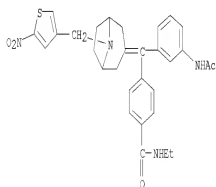
RN 823811-54-7 CAPLUS
 CN Benzamide, 4-[(3-acetylphenyl)[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



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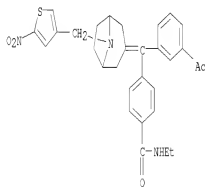
RN 823811-56-9 CAPLUS

CN Benzamide, 4-[[3-(acetilamino)phenyl][8-[(5-nitro-3-thienyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823811-57-0 CAPLUS

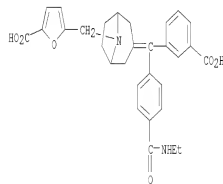
CN Benzamide, 4-[[3-(acetylphenyl)[8-[(5-nitro-3-thienyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823811-60-5 CAPLUS

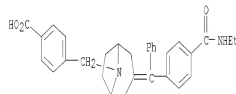
CN 2-Furancarboxylic acid, 5-[[3-[[3-(3-carboxyphenyl)[4-[(ethylamino)carbonyl]phenyl]methylene]-8-azabicyclo[3.2.1]oct-8-yl]methyl]- (CA INDEX NAME)

Print selected from 10541656.trn



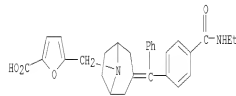
RN 823811-61-6 CAPLUS

CN Benzoic acid, 4-[[3-[[4-[(ethylamino)carbonyl]phenyl]phenyl]methylene]-8-azabicyclo[3.2.1]oct-8-yl]methyl]- (CA INDEX NAME)



RN 823811-62-7 CAPLUS

CN 2-Furancarboxylic acid, 5-[[3-[[4-[(ethylamino)carbonyl]phenyl]phenyl]methylene]-8-azabicyclo[3.2.1]oct-8-yl]methyl]- (CA INDEX NAME)



RN 823811-65-0 CAPLUS

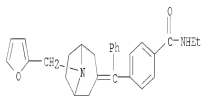
CN Benzamide, N-ethyl-4-[[8-[(2-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenyl]methyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CN 823811-64-9

CMF C28 H30 N2 O2

Print selected from 10541656.trn



CM 2

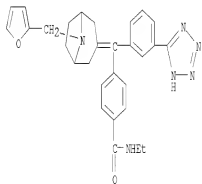
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CMF C2 H F3 O2



RN 823811-66-1 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][3-[1H-tetrazol-5-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 823811-67-2 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][3-[1H-tetrazol-5-yl]phenyl]methyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

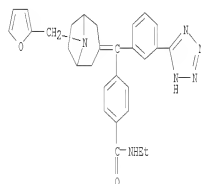
CM 1

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CM 2

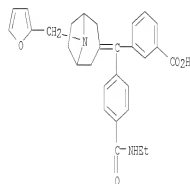
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RN 823811-68-3 CAPLUS

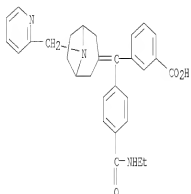
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-69-4 CAPLUS

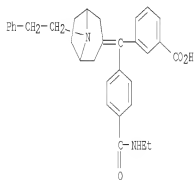
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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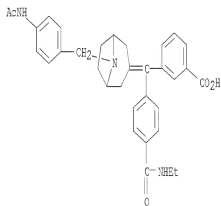
RN 823811-70-7 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



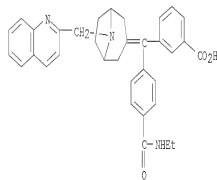
RN 823811-71-8 CAPLUS

CN Benzoic acid, 3-[[8-[[4-(acetylamino)phenyl]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][4-[(ethylamino)carbonyl]phenyl]methyl]- (CA INDEX NAME)



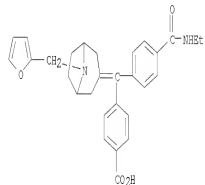
RN 823811-72-9 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-73-0 CAPLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

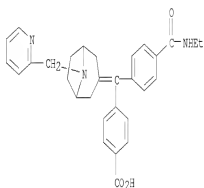


RN 823811-74-1 CAPLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

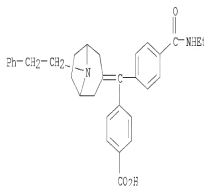


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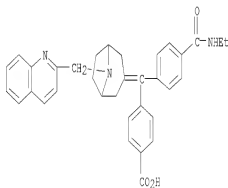
RN 823811-75-2 CAPLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-76-3 CAPLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

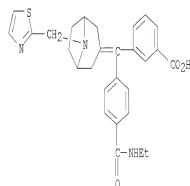


RN 823811-78-5 CAPLUS

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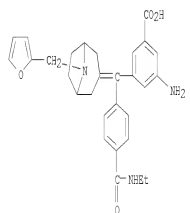
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CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-79-6 CAPLUS

CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

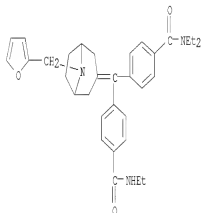


RN 823811-80-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

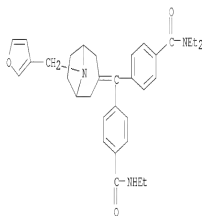
Page 82

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RN 823811-81-0 CAPLUS

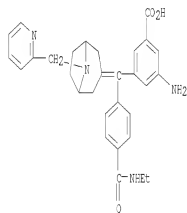
CN Benzamide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-82-1 CAPLUS

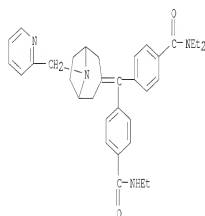
CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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RN 823811-84-3 CAPLUS

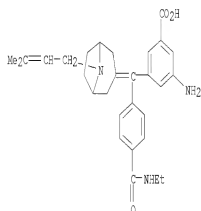
CN Benzamide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-85-4 CAPLUS

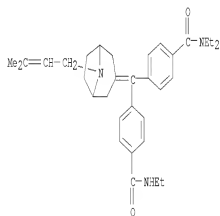
CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

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RN 823811-86-5 CAPLUS

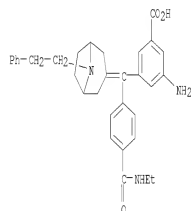
CN Benzanide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 823811-87-6 CAPLUS

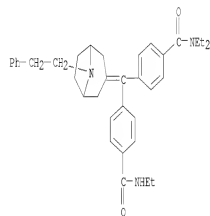
CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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RN 823811-88-7 CAPLUS

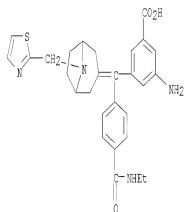
CN Benzanide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-89-8 CAPLUS

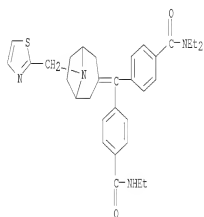
CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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RN 823811-90-1 CAPLUS

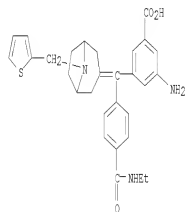
CN Benzanide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-91-2 CAPLUS

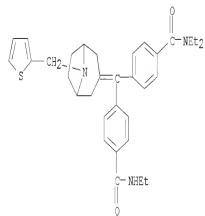
CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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RN 823811-92-3 CAPLUS

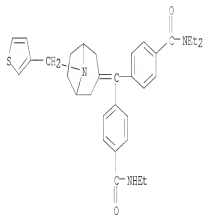
CN Benzanide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823811-93-4 CAPLUS

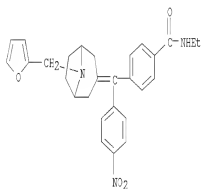
CN Benzanide, N,N-diethyl-4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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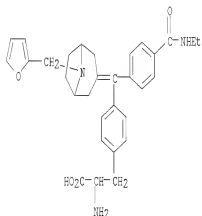
RN 823811-94-5 CAPLUS

CN Benzamide, N-ethyl-4-[(8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)(4-nitrophenyl)methyl]- (CA INDEX NAME)



RN 823811-95-6 CAPLUS

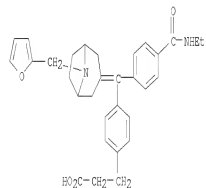
CN Phenylalanine, 4-[(4-[(ethylamino)carbonyl]phenyl)[8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



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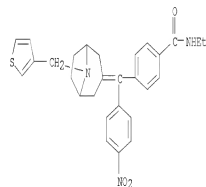
RN 823811-96-7 CAPLUS

CN Benzenepropanoic acid, 4-[(4-[(ethylamino)carbonyl]phenyl)[8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 823811-97-8 CAPLUS

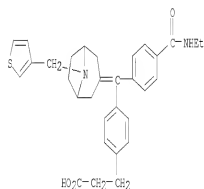
CN Benzamide, N-ethyl-4-[(4-nitrophenyl)[8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



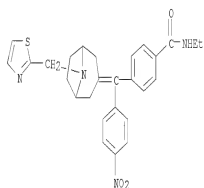
RN 823811-98-9 CAPLUS

CN Benzenepropanoic acid, 4-[(4-[(ethylamino)carbonyl]phenyl)[8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

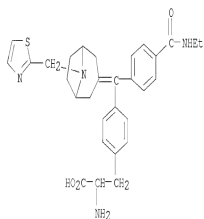
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RN 823811-99-0 CAPLUS
CN Benzamide, N-ethyl-4-[(4-nitrophenyl)[8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

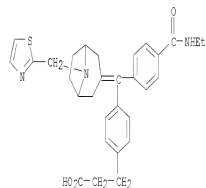


RN 823812-00-6 CAPLUS
CN Phenylalanine, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

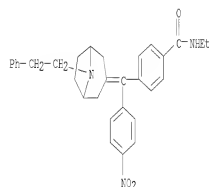


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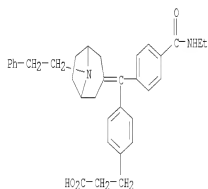
RN 823812-01-7 CAPLUS
CN Benzenepropanoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823812-03-9 CAPLUS
CN Benzamide, N-ethyl-4-[[4-(4-nitrophenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

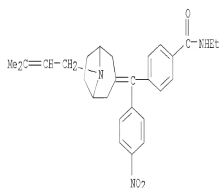


RN 823812-04-0 CAPLUS
CN Benzenepropanoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



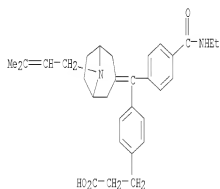
RN 823812-05-1 CAPLUS

CN Benzenamide, N-ethyl-4-[[[8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene](4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)



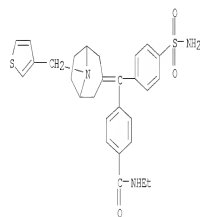
RN 823812-06-2 CAPLUS

CN Benzenepropanoic acid, 4-[[[4-[(ethylamino carbonyl)phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



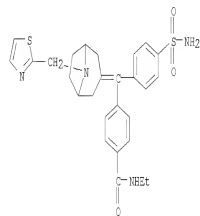
RN 823812-07-3 CAPLUS

CN Benzenamide, 4-[[[4-(aminosulfonyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823812-08-4 CAPLUS

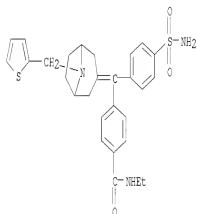
CN Benzenamide, 4-[[[4-(aminosulfonyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823812-09-5 CAPLUS

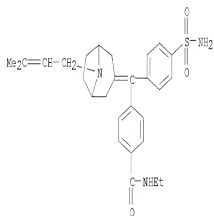
CN Benzenamide, 4-[[[4-(aminosulfonyl)phenyl][8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

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RN 823812-10-8 CAPLUS

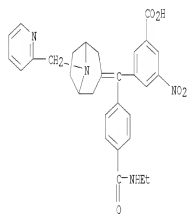
CN Benzamide, 4-[[4-(aminosulfonyl)phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (9CI) (CA INDEX NAME)



RN 823812-17-5 CAPLUS

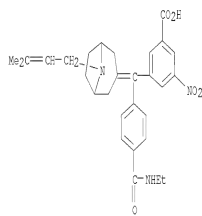
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)

Print selected from 10541656.trn



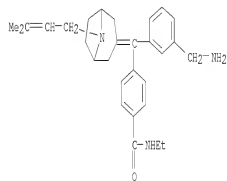
RN 823812-18-6 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (9CI) (CA INDEX NAME)



RN 823812-19-7 CAPLUS

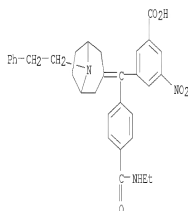
CN Benzamide, 4-[[3-(aminomethyl)phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (9CI) (CA INDEX NAME)



Print selected from 10541656.trn

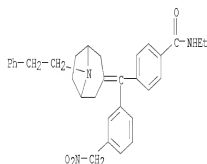
RN 823812-20-0 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)



RN 823812-21-1 CAPLUS

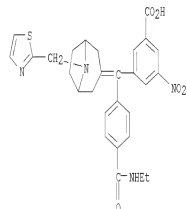
CN Benzamide, N-ethyl-4-[[[3-(nitromethyl)phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823812-22-2 CAPLUS

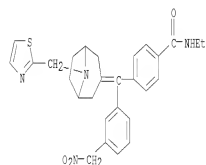
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)

Print selected from 10541656.trn



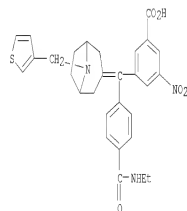
RN 823812-23-3 CAPLUS

CN Benzamide, N-ethyl-4-[[[3-(nitromethyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823812-24-4 CAPLUS

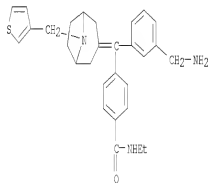
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)



Print selected from 10541656.trn

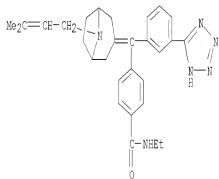
RN 823812-25-5 CAPLUS

CN Benzamide, 4-[[3-(aminomethyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823812-26-6 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene][3-(1H-tetrazol-5-yl)phenyl]methyl]- (9CI) (CA INDEX NAME)



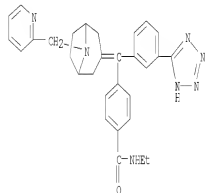
RN 823812-27-7 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][3-(1H-tetrazol-5-yl)phenyl]methyl]- (9CI) (CA INDEX NAME)



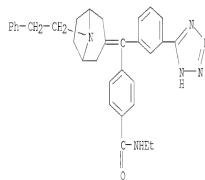
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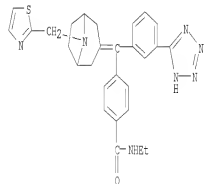
RN 823812-28-9 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][3-(1H-tetrazol-5-yl)phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 823812-29-9 CAPLUS

CN Benzamide, N-ethyl-4-[[3-(1H-tetrazol-5-yl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

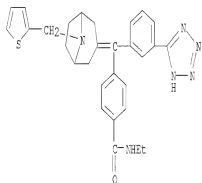


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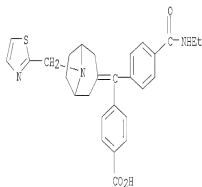
RN 823812-31-3 CASLUS

CN Benzanide, N-ethyl-4-[[3-[(1H-tetrazol-5-yl)phenyl][8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)



RN 823812-35-7 CASLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

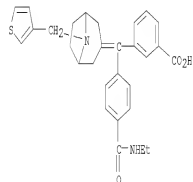


RN 823812-37-9 CASLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

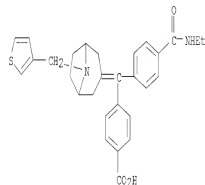


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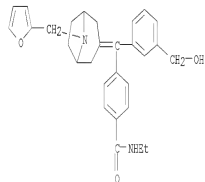
RN 823812-39-1 CASLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 823812-43-7 CASLUS

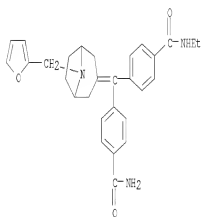
CN Benzanide, N-ethyl-4-[[8-(2-furanyl)methyl)-8-azabicyclo[3.2.1]oct-3-ylidene][5-(hydroxymethyl)phenyl)methyl]- (CA INDEX NAME)



RN 823812-45-9 CASLUS

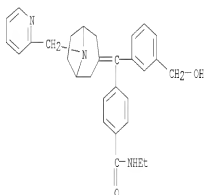
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CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



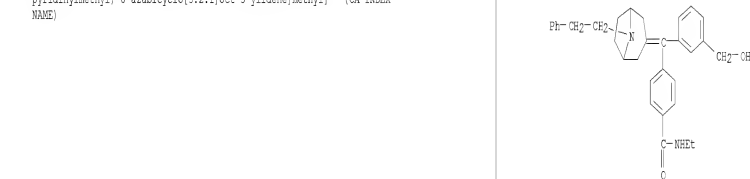
RN 823812-47-1 CAPLUS

CN Benzamide, N-ethyl-4-[[[3-(hydroxymethyl)phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

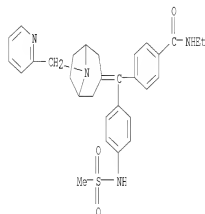


RN 823812-48-2 CAPLUS

CN Benzamide, N-ethyl-4-[[[4-[(methylsulfonyl)amino]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

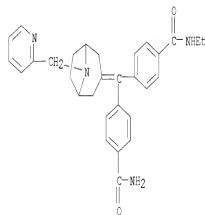


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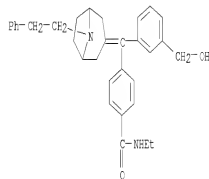
RN 823812-49-3 CAPLUS

CN Benzamide, 4-[[[4-(aminocarbonyl)phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 823812-50-6 CAPLUS

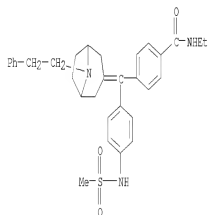
CN Benzamide, N-ethyl-4-[[[3-(hydroxymethyl)phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



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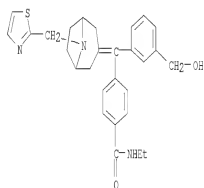
RN 823812-51-7 CAPLUS

CN Benzanide, N-ethyl-4-[[4-[(methylsulfonyl)amino]phenyl][8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



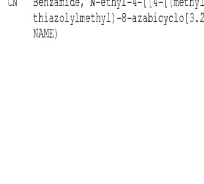
RN 823812-52-8 CAPLUS

CN Benzanide, N-ethyl-4-[[3-[(hydroxymethyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 823812-53-9 CAPLUS

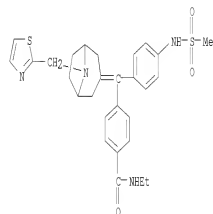
CN Benzanide, N-ethyl-4-[[4-[(methylsulfonyl)amino]phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



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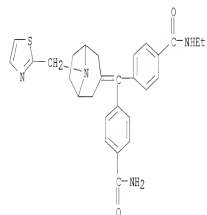
RN 823812-54-0 CAPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



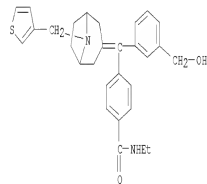
RN 823812-54-0 CAPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



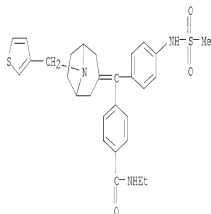
RN 823812-55-1 CAPLUS

CN Benzanide, N-ethyl-4-[[3-[(hydroxymethyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

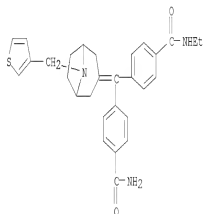


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RN 823812-56-2 CAPLUS
CN Benzamide, N-ethyl-4-[[4-[(methylsulfonyl)amino]phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

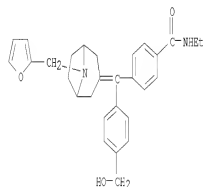


RN 823812-57-3 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

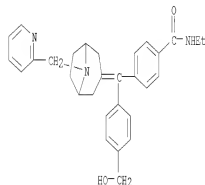


RN 823812-58-4 CAPLUS
CN Benzamide, N-ethyl-4-[[8-(2-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][4-(hydroxymethyl)phenyl]methyl]- (CA INDEX NAME)

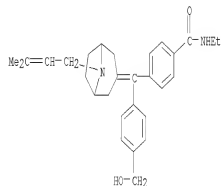
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RN 823812-59-5 CAPLUS
CN Benzamide, N-ethyl-4-[[4-(hydroxymethyl)phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



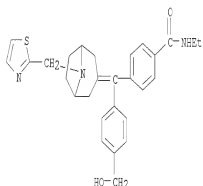
RN 823812-60-8 CAPLUS
CN Benzamide, N-ethyl-4-[[4-(hydroxymethyl)phenyl][8-(3-methyl-2-butanyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 823812-61-9 CAPLUS

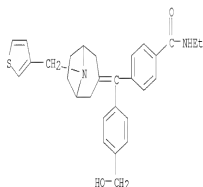
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CN Benzamide, N-ethyl-4-[[4-(hydroxymethyl)phenyl][8-(2-thiazolylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



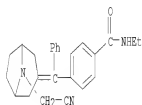
RN 823812-62-0 CAFLUS

CN Benzamide, N-ethyl-4-[[4-(hydroxymethyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 823812-67-5 CAFLUS

CN Benzamide, 4-[[8-(cyanomethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N-ethyl- (CA INDEX NAME)

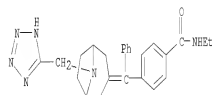


RN 823812-70-0 CAFLUS

CN Benzamide, N-ethyl-4-[phenyl[3-(1H-tetrazol-5-ylmethyl)-8-

Print selected from 10541656.trn

azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)



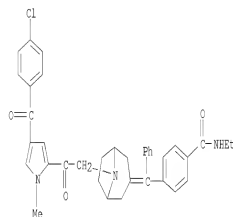
RN 823812-71-1 CAFLUS

CN Benzamide, N-ethyl-4-[phenyl[8-(2-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 823812-85-7 CAFLUS

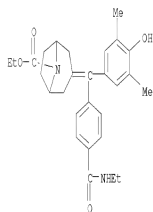
CN Benzamide, 4-[[8-[2-[4-(4-chlorobenzoyl)-1-methyl-1H-pyrrol-2-yl]-2-oxoethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N-ethyl- (CA INDEX NAME)



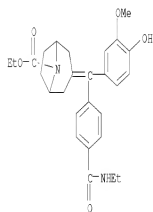
RN 823812-93-7 CAFLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][4-hydroxy-3,5-dimethylphenyl]methylene]-, ethyl ester (CA INDEX NAME)

Print selected from 10541686.trn

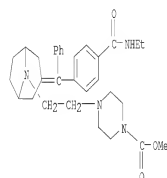


RN 823812-94-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[[4-[(ethylamino)carbonyl]phenyl]-(4-hydroxy-3-methoxyphenyl)methylene]-, ethyl ester (CA INDEX NAME)



RN 823812-95-9 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[2-[3-[[4-[(ethylamino)carbonyl]phenyl]phenyl]methylene]-8-azabicyclo[3.2.1]oct-8-yl]ethyl]-, methyl ester (CA INDEX NAME)

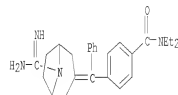
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RN 823812-99-3 CAPLUS
CN Benzamide, 4-[[[8-(aminoimino)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenyl]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 823812-98-2
CMP C26 H32 N4 O



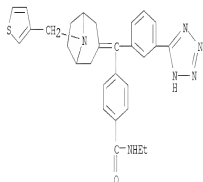
CM 2

CRM 76-05-1
CMP C2 H F3 O2



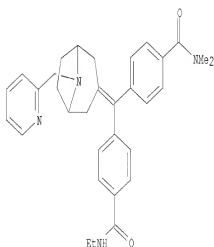
RN 823815-68-5 CAPLUS
CN Benzamide, N-ethyl-4-[[[3-(1H-tetrazol-5-yl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

Print selected from 10541656.trn



RN 823816-29-1 CAMELUS

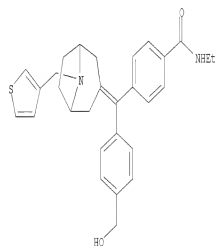
CN Benzanide, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N,N-dimethyl-, (+) - (9CI) (CA INDEX NAME)



RN 823816-30-4 CAMELUS

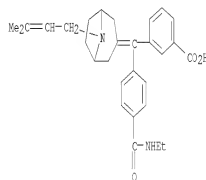
CN Benzanide, N-ethyl-4-[[[4-(hydroxymethyl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, (+) - (9CI) (CA INDEX NAME)

Print selected from 10541656.trn



RN 823816-48-4 CAMELUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



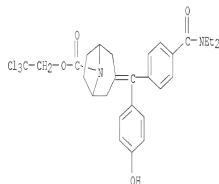
IT 359863-60-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

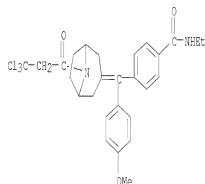
RN 359863-60-8 CAMELUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[[4-[(diethylamino)carbonyl]phenyl][4-(hydroxyphenyl)methylene]-, 2,2,2-trichloroethyl ester (CA INDEX NAME)

Print selected from 10541636.trn

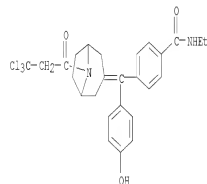


IT 359863-54-0P 359863-55-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of diarylmethyleneazabicyclooctanes as 5- or μ -opioid
 receptor modulators)
 RN 359863-54-0 CAPELUS
 CN Benzamide, N-ethyl-4-[(4-methoxyphenyl)-(8-(3,3,3-trichloro-1-oxopropyl)-8-
 azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



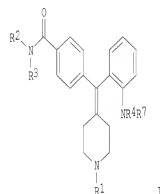
RN 359863-55-1 CAPELUS
 CN Benzamide, N-ethyl-4-[(4-hydroxyphenyl)-(8-(3,3,3-trichloro-1-oxopropyl)-8-
 azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

Print selected from 10541636.trn



111 ANSWER 7 OF 59 CAPELUS COPYRIGHT 2008 ACS on STM
 2004:1016017 Document No. 142:6430 Preparation of diarylmethylene
 piperidine derivatives as opioid δ receptor ligands for treating
 pain, anxiety and functional gastrointestinal disorders. Brown, William
 L.; Griffin, Andrew; Jin, Shujuan (Astrazeneca AB, Swed.; Astrazeneca UK
 Limited). PCT Int. Appl. WO 2004/01522 A1 20041125, 131 pp. DESIGNATED
 STATES: W: AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BE, CA,
 CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GR, GE,
 GH, GM, HN, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NI, NO, NZ, OM, PG, PH,
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
 UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CE, CG, CH, CI,
 CM, CY, DE, DG, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL,
 PT, SE, SI, TD, TG, TR. (English). CODEN: PIXX02. APPLICATION: WO
 2004-GB2074 20040513. PRIORITY: SE 2003-1444 20030516; SE 2004-24
 20040109.

GI



AB The title compds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R4 =
 H, (un)substituted alkyl, cycloalkyl; R7 = H, OH, alkyl, etc.] which are
 useful in therapy, in particular in the management of pain, were prepared
 E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; R4 = CO2Me; R7 =

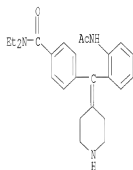
II, starting from Me 4-(bromomethyl)benzoate, was given. The comps. I were found to be active toward human δ receptors. Generally, for most of the comps. I the IC50 values are in the range of 0.48 nM to 17.9 nM. The pharmaceutical composition comprising the compound I is disclosed.

II 798549-77-4P 798549-78-7P 798549-83-4P
798549-93-4P 798549-94-7P 798549-95-8P
798549-96-9P

KL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); B10L (Biological study); PREP (Preparation); RACT (Reactant or reagent); USSS (Uses)
(preparation of diarylmethylene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

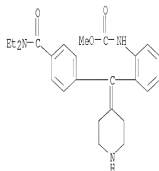
RN 798549-77-4 CAPLUS

CN Benzamide, 4-[[2-(acetlamino)phenyl]-4-piperidinidenemethyl]-N,N-diethyl- (CA INDEX NAME)



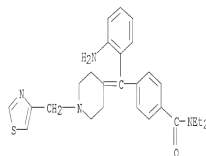
RN 798549-78-7 CAPLUS

CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinidenemethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



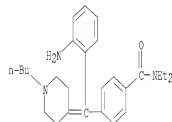
RN 798549-83-4 CAPLUS

CN Benzamide, 4-[[2-amino)phenyl][1-(4-thiazolylmethyl)-4-piperidinidenemethyl]-N,N-diethyl- (CA INDEX NAME)



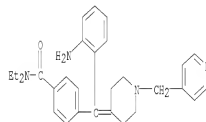
RN 798549-93-6 CAPLUS

CN Benzamide, 4-[[2-amino)phenyl][1-butyl-4-piperidinidenemethyl]-N,N-diethyl- (CA INDEX NAME)



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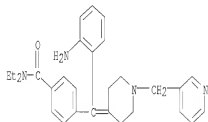
CN Benzamide, 4-[[2-amino)phenyl][1-(4-pyridinylmethyl)-4-piperidinidenemethyl]-N,N-diethyl- (CA INDEX NAME)



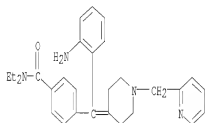
RN 798549-95-8 CAPLUS

CN Benzamide, 4-[[2-amino)phenyl][1-(3-pyridinylmethyl)-4-piperidinidenemethyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541636.trn



RN 798549-96-9 CAPLUS
CN Benzanide, 4-[(2-aminophenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



II 798549-16-3P 798549-17-4P 798549-18-5P
798549-19-6P 798549-21-0P 798549-22-1P
798549-23-2P 798549-24-3P 798549-25-4P
798549-26-5P 798549-27-6P 798549-28-7P
798549-29-8P 798549-30-1P 798549-31-2P
798549-32-3P 798549-33-4P 798549-34-5P
798549-35-6P 798549-36-7P 798549-37-8P
798549-38-9P 798549-39-0P 798549-40-1P
798549-41-2P 798549-42-3P 798549-43-4P
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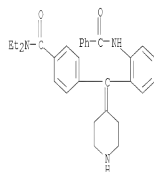
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798550-11-5P 798550-12-6P 798550-13-7P
798550-14-8P 798550-15-9P 798550-16-0P
798550-17-1P 798550-25-1P 798550-26-2P
798550-27-3P 798550-28-4P 798550-29-5P
798550-30-6P 798550-31-7P 798550-32-8P
798550-33-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

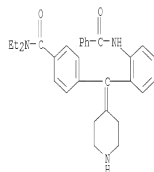
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CN Benzanide, 4-[[2-(benzoylamino)phenyl]-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-17-4 CAPLUS
CN Benzanide, 4-[[2-(benzoylamino)phenyl]-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-16-3
CMF C30 E33 N3 O2



Print selected from 10541656.trn

CM 2

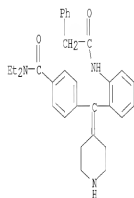
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-19-5 CAPLUS

CN Benzeneacetamide, N-[2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



RN 798549-19-6 CAPLUS

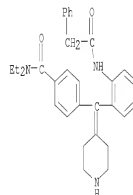
CN Benzeneacetamide, N-[2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (10:1) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-19-5

CMF C31 H35 N3 O2

Print selected from 10541656.trn



CM 2

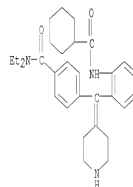
CRN 76-05-1

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RN 798549-21-0 CAPLUS

CN Benzamide, 4-[[2-[[cyclohexylcarbonyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-22-1 CAPLUS

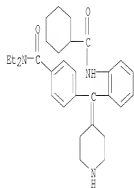
CN Benzamide, 4-[[2-[[cyclohexylcarbonyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

Print selected from 10541656.trn

CM 1

CRN 798549-21-0

CMF C30 H39 N3 O2



CM 2

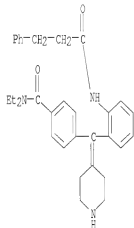
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-23-2 CAPLUS

CN Benzenepropanamide, N-[2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



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Print selected from 10541656.trn

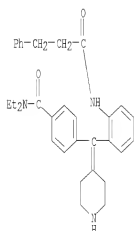
RN 798549-24-3 CAPLUS

CN Benzenepropanamide, N-[2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-23-2

CMF C52 H37 N3 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2

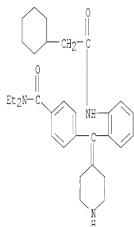


RN 798549-25-4 CAPLUS

CN Benzamide, 4-[[2-[[4-[(cyclohexylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-8,N-diethyl- (9CI) (CA INDEX NAME)

Page 124

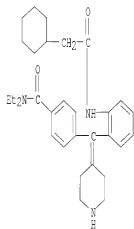
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RN 798549-26-5 CAPLUS
 CN Benzamide, 4-[[2-[(cyclohexylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRM 798549-25-4
 CMP C31 E41 N3 02



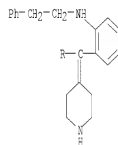
CM 2

CRM 76-05-1
 CMP C2 H F3 02

Print selected from 10541686.trn



RN 798549-27-6 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[2-[(2-phenylethyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

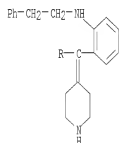


RN 798549-28-7 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[2-[(2-phenylethyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRM 798549-27-6
 CMP C31 H37 N3 0

Print selected from 10541656.trn

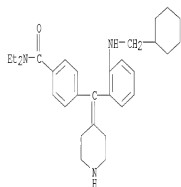


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798549-29-8 CAPLUS
CN Benamide, 4-[[2-[(cyclohexylmethyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-30-1 CAPLUS

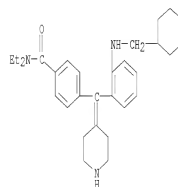
Page 127

Print selected from 10541656.trn

CN Benamide, 4-[[2-[(cyclohexylmethyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-29-8
CMF C30 H41 N3 O

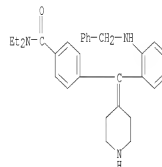


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798549-31-2 CAPLUS
CN Benamide, N,N-diethyl-4-[[2-[(phenylmethyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



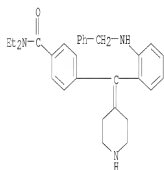
Page 128

Print selected from 10541656.trn

RN 798549-32-3 CAPLUS
 CN Benamide, N,N-diethyl-4-[[2-[(phenylmethyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-31-2
 CME C30 H35 N3 O



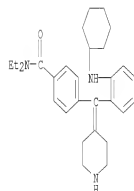
CM 2

CRN 76-05-1
 CME C2 H F3 O2



RN 798549-33-4 CAPLUS
 CN Benamide, 4-[[2-(cyclohexylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

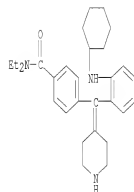
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RN 798549-34-5 CAPLUS
 CN Benamide, 4-[[2-(cyclohexylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-33-4
 CME C29 H39 N3 O



CM 2

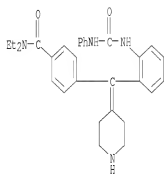
CRN 76-05-1
 CME C2 H F3 O2



RN 798549-35-6 CAPLUS

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CN Benzamide, N,N-diethyl-4-[[2-[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



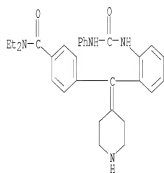
RN 798549-36-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-35-6

CMF C30 E34 W4 02



CM 2

CRN 76-05-1

CMF C2 H F3 O2

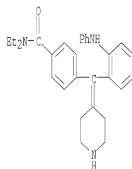


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RN 798549-37-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(phenylamino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



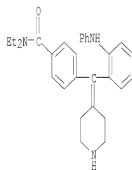
RN 798549-38-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(phenylamino)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-37-8

CMF C29 H33 N3 O



CM 2

CRN 76-05-1

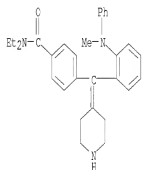
CMF C2 H F3 O2



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Print selected from 10541656.trn

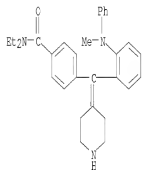
RN 798549-39-0 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-(methylphenylamino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798549-40-3 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-(methylphenylamino)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 798549-39-0
 CMP C30 H35 N3 O



CM 2

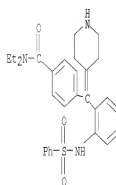
CRN 76-05-1
 CMP C2 H F3 O2



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Print selected from 10541656.trn

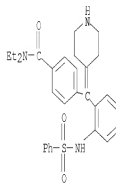
RN 798549-41-4 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-[(phenylsulfonyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798549-42-5 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-[(phenylsulfonyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-41-4
 CMP C29 H33 N3 O3 S



CM 2

CRN 76-05-1
 CMP C2 H F3 O2

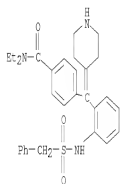
Page 134

Print selected from 10541656.trn



RN 798549-43-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



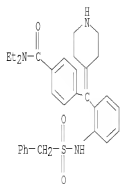
RN 798549-44-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-43-6

CMF C30 H35 N3 O3 S



CM 2

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Print selected from 10541656.trn

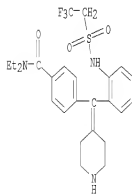
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-45-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[4-piperidinylidene-2-[[[(2,2,2-trifluoroethyl)sulfonyl]amino]phenyl]methyl]- (CA INDEX NAME)



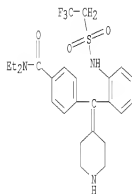
RN 798549-46-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[4-piperidinylidene-2-[[[(2,2,2-trifluoroethyl)sulfonyl]amino]phenyl]methyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-45-8

CMF C25 H30 F3 N3 O3 S



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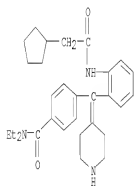
CM 2

CRM 76-05-1
CMF C2 H F3 O2



RN 798549-47-0 CAPLUS

CN Benzamide, 4-[[2-[(cyclopentylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)



RN 798549-48-1 CAPLUS

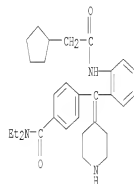
CN Benzamide, 4-[[2-[(cyclopentylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRM 798549-47-0
CMF C30 H39 N3 O2

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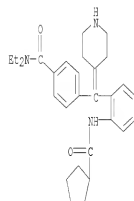
CM 2

CRM 76-05-1
CMF C2 H F3 O2



RN 798549-49-2 CAPLUS

CN Benzamide, 4-[[2-[(cyclopentylcarbonyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-50-5 CAPLUS

CN Benzamide, 4-[[2-[(cyclopentylcarbonyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

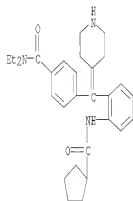
Page 138

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CM 1

CRN 798549-49-2

CMF C29 H37 N3 O2



CM 2

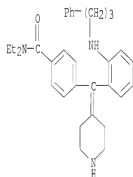
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-51-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(2-[(3-phenylpropyl)amino]phenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



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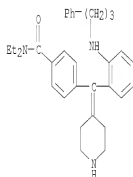
RN 798549-52-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[(2-[(3-phenylpropyl)amino]phenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-51-6

CMF C32 H39 N3 O



CM 2

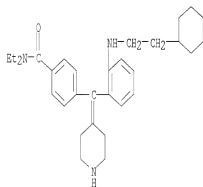
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-53-8 CAPLUS

CN Benzamide, 4-[(2-[(2-cyclohexylethyl)amino]phenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



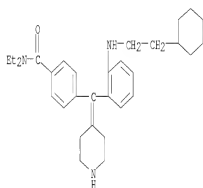
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RN 798549-54-9 CAPLUS
 CN Benzamide, 4-[[2-[(2-cyclohexylethyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:13) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-53-8
 CMF C31 H43 N3 O



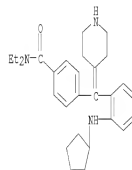
CM 2

CRN 76-05-1
 CMF C2 H F3 O2



RN 798549-55-0 CAPLUS
 CN Benzamide, 4-[[2-(cyclopentylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

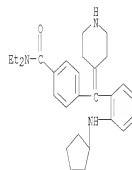
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RN 798549-56-1 CAPLUS
 CN Benzamide, 4-[[2-(cyclopentylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-55-0
 CMF C28 H37 N3 O



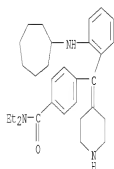
CM 2

CRN 76-05-1
 CMF C2 H F3 O2



RN 798549-57-2 CAPLUS
 CN Benzamide, 4-[[2-(cycloheptylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541656.trn



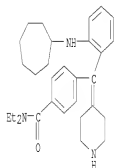
RN 798549-59-3 CAPLUS

CM Benzamide, 4-[[2-(cycloheptylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-57-2

CMF C30 H41 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2

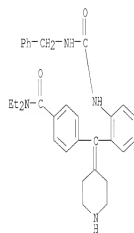


RN 798549-59-4 CAPLUS

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CM Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



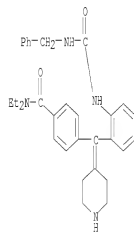
RN 798549-60-7 CAPLUS

CM Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-59-4

CMF C31 H36 N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2

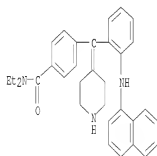
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RN 798549-61-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(1-naphthalenylamino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



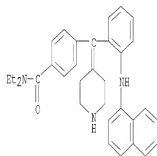
RN 798549-62-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(1-naphthalenylamino)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-61-8

CMF C33 H35 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2

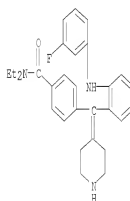
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RN 798549-63-0 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(3-fluorophenyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



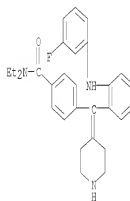
RN 798549-64-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(3-fluorophenyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-63-0

CMF C29 H32 F N3 O



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CM 2

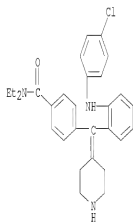
CRN 76-05-1

CMF C2 H F3 O2



RN 799549-65-2 CASLUS

CM Benzamide, 4-[[2-[(4-chlorophenyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 799549-66-3 CASLUS

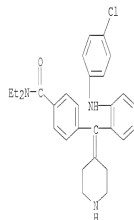
CM Benzamide, 4-[[2-[(4-chlorophenyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:7) (3CI) (CA INDEX NAME)

CM 1

CRN 799549-65-2

CMF C29 H32 Cl N3 O

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CM 2

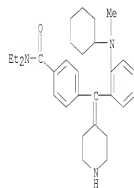
CRN 76-05-1

CMF C2 H F3 O2



RN 798549-67-4 CASLUS

CM Benzamide, 4-[[2-(cyclohexylmethylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-68-5 CASLUS

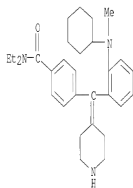
CM Benzamide, 4-[[2-(cyclohexylmethylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (2:5) (3CI) (CA INDEX NAME)

Print selected from 10541686.trn

CM 1

CRN 798549-67-4

CMP C30 H41 N3 O



CM 2

CRN 76-05-1

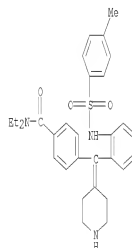
CMP C2 H F3 O2



RN 798549-69-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(4-methylphenyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

Print selected from 10541686.trn



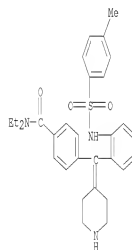
RN 798549-70-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(4-methylphenyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-69-6

CMP C30 H35 N3 O3 S



CM 2

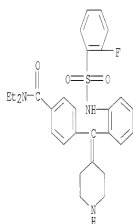
CRN 76-05-1

CMP C2 H F3 O2

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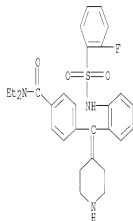
RN 798549-71-0 CAPLUS
CN Benzanide, N,N-diethyl-4-[[2-[[[(2-fluorophenyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798549-72-1 CAPLUS
CN Benzanide, N,N-diethyl-4-[[2-[[[(2-fluorophenyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-71-0
CMF C29 H32 F N3 O3 S



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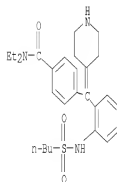
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CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798549-73-2 CAPLUS
CN Benzanide, 4-[[2-[[[butylsulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl]- (CA INDEX NAME)



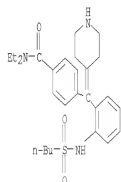
RN 798549-74-3 CAPLUS
CN Benzanide, 4-[[2-[[[butylsulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-73-2
CMF C27 H37 N3 O3 S

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Print selected from 10541656.trn

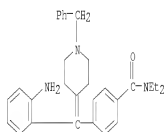


CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798549-75-4 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



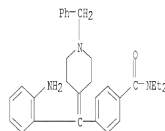
RN 798549-76-5 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-75-4
CME C30 H35 N3 O

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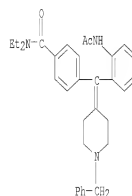


CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798549-79-8 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

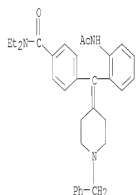


RN 798549-80-1 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-79-8
CME C32 H37 N3 O2

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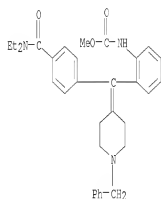


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798549-81-2 CAMELUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

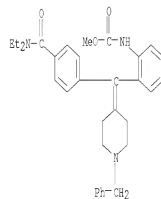


RN 798549-82-3 CAMELUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-

piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3)
(9CI) (CA INDEX NAME)

CM 1

CRN 798549-81-2
CMF C52 H57 N3 O3

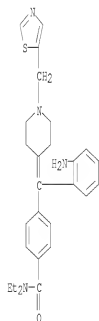


CM 2

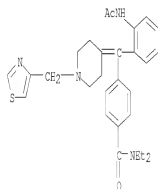
CRN 76-05-1
CMF C2 H F3 O2



RN 798549-84-5 CAMELUS
CN Benamide, 4-[(2-aminophenyl)[1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



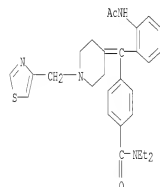
RN 798549-85-6 CAPLUS
 CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-86-7 CAPLUS
 CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-85-6
 CME C29 E14 W4 02 S

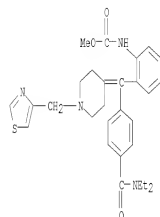


CM 2

CRN 74-05-1
 CME C2 H F3 02



RN 798549-87-8 CAPLUS
 CN Carbamic acid, [2-[[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 798549-88-9 CAPLUS
 CN Carbamic acid, [2-[[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]phenyl]-, methyl ester,

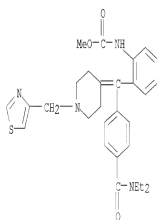
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trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-87-8

CMF C29 H34 N4 O3 S



CM 2

CRN 76-05-1

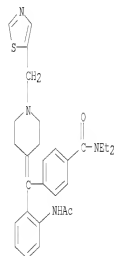
CMF C2 H F3 O2



RN 799549-89-0 CAPLUS

CM Benzamide, 4-[[2-(acetamino)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541656.trn



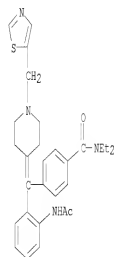
RN 798549-90-3 CAPLUS

CM Benzamide, 4-[[2-(acetamino)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-89-0

CMF C29 H34 N4 O2 S



CM 2

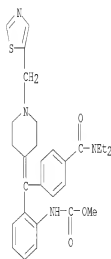
CRN 76-05-1

CMF C2 H F3 O2

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RN 798549-91-4 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



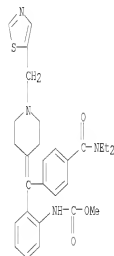
RN 798549-92-5 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRM 798549-91-4
CMF C29 H34 N4 O3 S

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Print selected from 10541636.trn

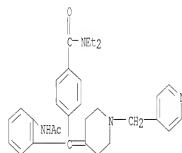


CM 2

CRM 76-05-1
CMF C2 H F3 O2



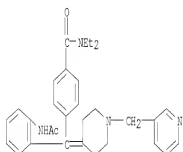
RN 798549-97-0 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798549-98-1 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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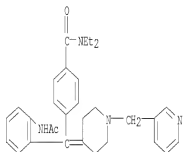
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RN 798549-99-2 CAMELUS
 CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (2:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-98-1
 CMF C31 H36 N4 O2



CM 2

CRN 76-05-1
 CMF C2 H F3 O2

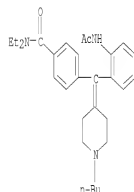


RN 798550-00-2 CAMELUS
 CN Benzamide, 4-[[2-(acetylamino)phenyl][1-butyl-4-piperidinylidene)methyl]-

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Print selected from 10541656.trn

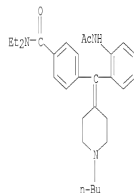
N,N-diethyl- (CA INDEX NAME)



RN 798550-01-3 CAMELUS
 CN Benzamide, 4-[[2-(acetylamino)phenyl][1-butyl-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-00-2
 CMF C29 H39 N3 O2



CM 2

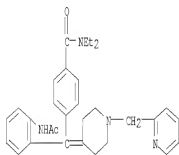
CRN 76-05-1
 CMF C2 H F3 O2

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Print selected from 10541636.trn



RN 798550-02-4 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

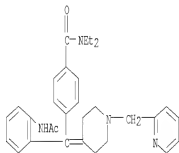


RN 798550-03-5 CAPLUS
CN Benzamide, 4-[[2-(acetylamino)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-02-4

CMF C31 H36 N4 O2



CM 2

CRN 76-05-1

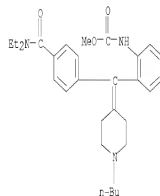
CMF C2 H F3 O2

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RN 798550-04-6 CAPLUS
CN Carbamic acid, [2-[[1-butyl-4-piperidinylidene][4-[[diethylamino]carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

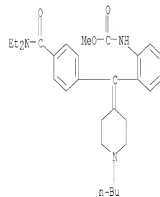


RN 798550-05-7 CAPLUS
CN Carbamic acid, [2-[[1-butyl-4-piperidinylidene][4-[[diethylamino]carbonyl]phenyl]methyl]phenyl]-, methyl ester, trifluoroacetate (10:27) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-04-6

CMF C29 H39 N3 O3



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CM 2

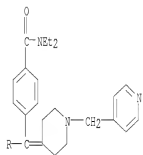
CRN 76-05-1

CMF C2 H F3 O2



RN 798550-06-8 CAPLUS

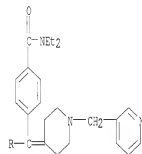
CM Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 798550-07-9 CAPLUS

CM Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)

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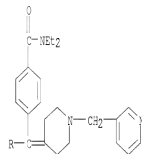
RN 798550-08-0 CAPLUS

CM Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-07-9

CMF C31 H36 N4 O3



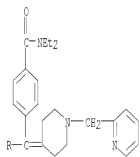
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CM 2

CRN 76-05-1
CMF C2 H F3 O2

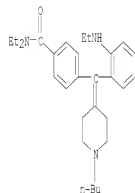


RN 798550-09-1 CAPLUS
CN Carboxylic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 798550-10-4 CAPLUS
CN Benzamide, 4-[(1-butyl-4-piperidinylidene)[2-(ethylamino)phenyl]methyl]-N,N-diethyl- (CA INDEX NAME)

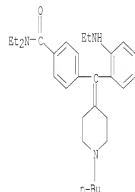
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RN 798550-11-5 CAPLUS
CN Benzamide, 4-[(1-butyl-4-piperidinylidene)[2-(ethylamino)phenyl]methyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-10-4
CMF C29 H41 N3 O



CM 2

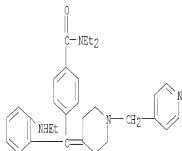
CRN 76-05-1
CMF C2 H F3 O2



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RN 798550-12-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(ethylamino)phenyl][1-(4-pyridylmethyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)



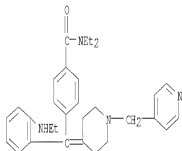
RN 798550-13-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(ethylamino)phenyl][1-(4-pyridylmethyl)-4-piperidinyldene]methyl]-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRM 798550-12-6

CMF C31 H38 N4 O



CM 2

CRM 76-05-1

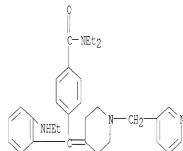
CMF C2 H F3 O2



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RN 798550-14-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(ethylamino)phenyl][1-(3-pyridylmethyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)



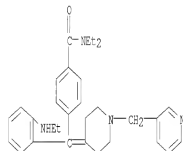
RN 798550-15-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(ethylamino)phenyl][1-(3-pyridylmethyl)-4-piperidinyldene]methyl]-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRM 798550-14-8

CMF C31 H38 N4 O



CM 2

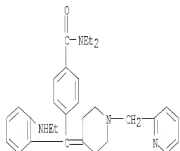
CRM 76-05-1

CMF C2 H F3 O2



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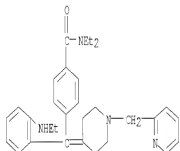
RN 798550-16-0 CAPLUS
 CN Benamide, N,N-diethyl-4-[(2-(ethylamino)phenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 798550-17-1 CAPLUS
 CN Benamide, N,N-diethyl-4-[(2-(ethylamino)phenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-16-0
 CMF C31 E38 N4 O



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



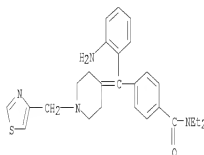
Page 173

Print selected from 10541656.trn

RN 798550-25-1 CAPLUS
 CN Benamide, 4-[(2-aminophenyl)[1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-83-4
 CMF C27 E32 N4 O S



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



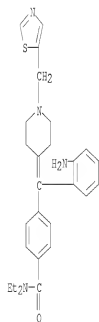
RN 798550-26-2 CAPLUS
 CN Benamide, 4-[(2-aminophenyl)[1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-84-5
 CMF C27 E32 N4 O S

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CM 2

CRN 76-05-1
CMF C2 H F3 O2



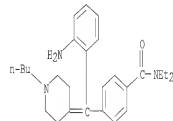
RN 798550-27-3 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)(1-butyl-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-93-6
CMF C27 H37 N3 O

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CM 2

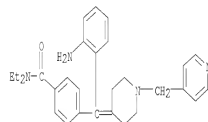
CRN 76-05-1
CMF C2 H F3 O2



RN 798550-28-4 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)(1-(4-pyridinylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:12) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-94-7
CMF C29 H34 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

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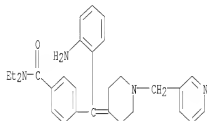
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RN 799550-29-5 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)[1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 799549-95-8
CMF C29 H34 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2



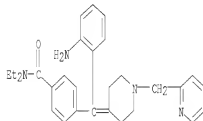
RN 799550-30-8 CAPLUS
CN Benzamide, 4-[(2-aminophenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 799549-96-9
CMF C29 H34 N4 O

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CM 2

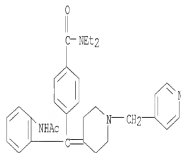
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CMF C2 H F3 O2



RN 799550-31-9 CAPLUS
CN Benzamide, 4-[(2-(acetylamino)phenyl)[1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 799549-97-0
CMF C31 H36 N4 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2

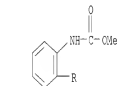
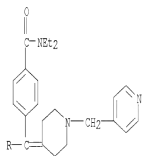
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RN 799550-32-0 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (5:1) (9CI) (CA INDEX NAME)

CM 1

CRN 799550-06-8
CMF C31 H36 N4 O3



CM 2

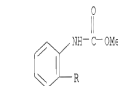
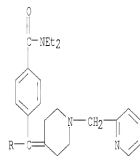
CRN 76-05-1
CMF C2 H F3 O2



RN 799550-33-1 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 799550-09-1
CMF C31 H36 N4 O3



CM 2

CRN 76-05-1
CMF C2 H F3 O2

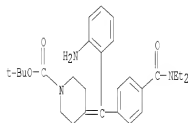


IT 799550-18-2P 799550-19-3P 799550-20-6P
799550-21-7P
RU: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

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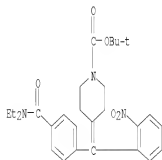
RN 798550-18-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(4-[(2-aminophenyl)[4-[(diethylamino)carbonyl]phenyl]methylane)-, 1,1-dimethylethyl ester (CA INDEX NAME)



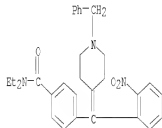
RN 798550-19-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(4-[(diethylamino)carbonyl]phenyl][2-nitrophenyl]methylane)-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 798550-20-6 CAPLUS

CN Benzanide, N,N-diethyl-4-[(2-nitrophenyl)[1-(phenylmethyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)

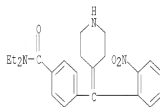


RN 798550-21-7 CAPLUS

CN Benzanide, N,N-diethyl-4-[(2-nitrophenyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)

Page 181

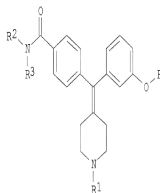
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111 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM

2004:1016016 Document No. 142:6429 Preparation of diarylmethylidene piperidine derivatives as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders. Brown, William L.; Graffin, Andrew (Astrazeneca AB, Sued., Astrazeneca UK Limited), PCT Int. Appl. No. 2004/01521 A1 2004/1125, 47 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BG, BO, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; BW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LJ, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXX02. APPLICATION: WO 2004-GB2073 2004/513. PRIORITY: SE 2003-1443 20030516.

GI



I

AB The title comds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R3 = H, (un)substituted alkyl, cycloalkyl; R4 = (un)substituted alkyl, cycloalkyl, aryl, etc.] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; R4 = CH2Ph], starting from the 4-bromomethylbenzoate, was given. The comds. I were found to be active toward human δ receptors. Generally, for most of the comds. I the IC50 values are in the range of 0.31 nM to 1.30 nM. The pharmaceutical composition comprising the compound I is disclosed.

IT 798562-29-SP 798562-30-EP 798562-31-9P

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Print selected from 10541656.trn

798562-32-0P 798562-33-1P 798562-34-2P

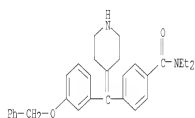
798562-35-3P 798562-36-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

[preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders]

RN 798562-29-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(phenylmethoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



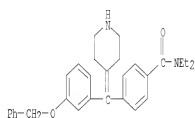
RN 798562-30-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(phenylmethoxy)phenyl]-4-piperidinylidenemethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CEN 798562-29-5

CMF C30 H34 N2 O2



CM 2

CEN 76-05-1

CMF C2 H F3 O2

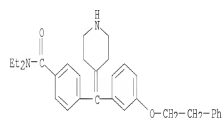
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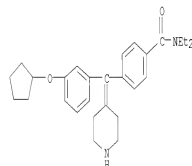
RN 798562-31-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(2-phenylethoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798562-32-0 CAPLUS

CN Benzamide, 4-[[3-(cyclopentylloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, (CA INDEX NAME)



RN 798562-33-1 CAPLUS

CN Benzamide, 4-[[3-(cyclopentylloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate [10:13] (9CI) (CA INDEX NAME)

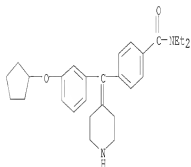
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CEN 798562-32-0

CMF C28 H36 N2 O2

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Print selected from 10541656.trn



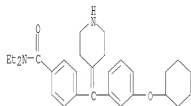
CM 2

CRN 76-05-1
CMF C2 H F3 O2



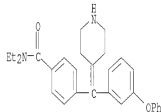
RN 798562-34-2 CAPLUS

CN Benzamide, 4-[[3-(cyclohexyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798562-35-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-phenoxyphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



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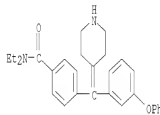
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RN 798562-36-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-phenoxyphenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-35-3
CMF C29 H32 N2 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2

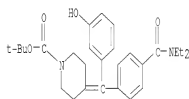


IT 692246-40-5P 692246-42-7P 798562-50-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 692246-40-5 CAPLUS

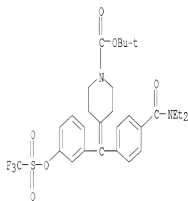
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](3-hydroxyphenyl)methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



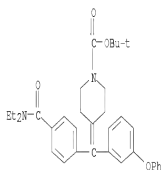
Page 166

Print selected from 10541656.tzn

RN 692246-42-7 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-[[[trifluoromethyl]sulfonyl]oxy]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



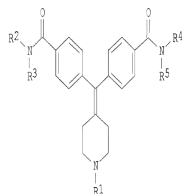
RN 798562-50-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-phenoxypheyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



111 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN
2004:1016015 Document No. 142:6428 Preparation of diarylmethylene
piperidine derivatives as opioid δ receptor ligands for treating
pain, anxiety and functional gastrointestinal disorders. Brown, William
L.; Griffin, Andrew (AstraZeneca AB, Sued.; AstraZeneca UK Limited). PCT
Int. Appl. WO 2004/101520 A1 20041125, 67 pp. DESIGNATED STATES: W: AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BT, BE, CA, CE, CN, CO, CR,
CU, CZ, DE, DK, DM, EE, EG, ES, FI, GB, GD, GE, GR, GU, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MG, MK, MN, MW, MX, MY, NA, NI, NG, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SI, SK, SL, SV, TW, TZ, TT, TG, TH, TD, US, UG, UA, VC,
VN, YU, ZA, ZM, ZW; RH: AT, BE, BG, BR, BY, CY, CZ, DE, EE, ES, FR, GB,
GR, IE, IT, LU, MC, MA, MK, NL, NO, PT, SE, SG, SK,
TG, TR. (English). CIDEEN: P1XX02. APPLICATION: WO 2004-082071 20040513.

Print selected from 10541656.tzn

PRIORITY: SE 2003-1445 20030516.
GI



AB The title comps. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R3 =
H, (un)substituted alkyl, cycloalkyl; R4-R5 = H, (un)substituted alkyl,
cycloalkyl, etc.] which are useful in therapy, in particular in the
management of pain and anxiety, were prepared. E.g., a multi-step synthesis
of I [R1 = 2-pyridylmethyl; R2, R3 = Et; R4, R5 = H], starting from Me
4-(bromomethyl)benzoate, was given. Generally, for most of the comps. I
the IC50 values towards human δ receptor are in the range of 0.30 nM
to 34.4 nM. The pharmaceutical composition comprising the compound I is
disclosed.

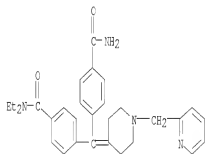
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798559-37-2P 798559-38-3P 798559-39-4P
798559-40-7P 798559-41-8P 798559-42-9P
798559-43-0P 798559-44-1P 798559-45-2P
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798559-61-2P 798559-62-3P 798559-63-4P
798559-64-5P 798559-65-6P 798559-66-7P
798559-75-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THF
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of diarylmethylene piperidine derivs. as opioid δ
receptor ligands for treating pain, anxiety and functional
gastrointestinal disorders)

RN 798559-28-1 CAPLUS
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piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

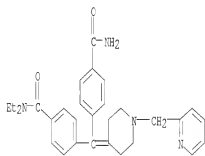
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RN 798559-29-2 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-29-1
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CM 2

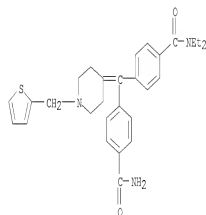
CRN 76-05-1
CMF C2 H F3 O2



RN 799559-30-5 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

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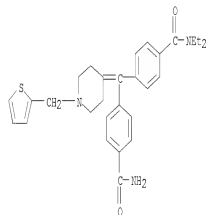
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RN 798559-31-6 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-30-5
CMF C29 H33 N3 O2 S



CM 2

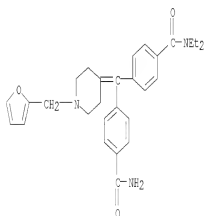
CRN 76-05-1
CMF C2 H F3 O2

Page 190

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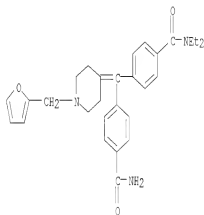
RN 798559-32-7 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-33-8 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-32-7
CMF C29 H33 N3 O3



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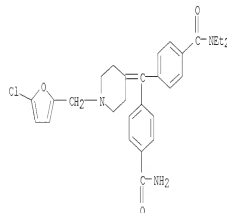
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CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798559-34-9 CAPLUS
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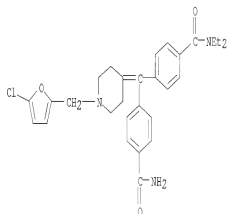
RN 798559-35-0 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(5-chloro-2-furanyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-34-9
CMF C29 H32 Cl N3 O3

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Print selected from 10541656.trn

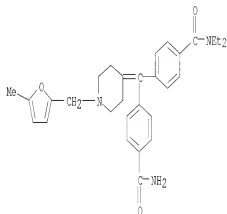


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798559-36-1 CAFLUS
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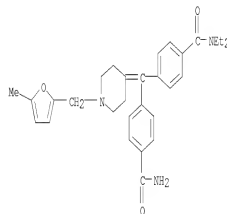
RN 798559-37-2 CAFLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(5-methyl-2-furanyl)methyl]-4-

Print selected from 10541656.trn

piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-36-1
CMF C30 H35 N3 O3



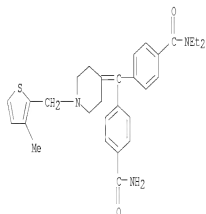
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798559-38-3 CAFLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(3-methyl-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

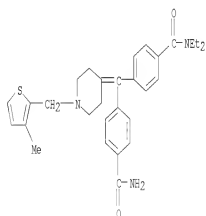
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RN 798559-39-4 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(3-methyl-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

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CRN 798559-39-3
CMF C30 E35 N3 O2 S



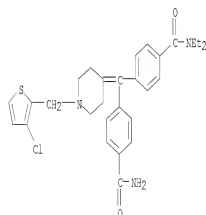
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CMF C2 H F3 O2

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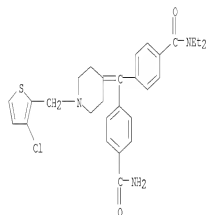
RN 798559-40-7 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(3-chloro-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-41-8 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(3-chloro-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

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CRN 798559-40-7
CMF C29 H32 Cl N3 O2 S



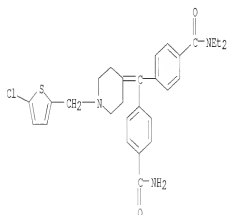
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CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798559-42-9 CAPLUS
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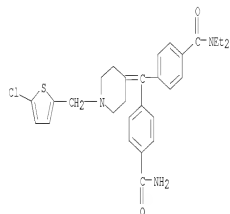
RN 798559-43-0 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(5-chloro-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-42-9
CME C29 H52 Cl N3 O2 S

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Print selected from 10541656.trn

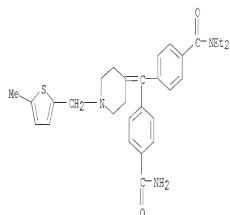


CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798559-44-1 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(5-methyl-2-thienyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-45-2 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(5-methyl-2-thienyl)methyl]-4-

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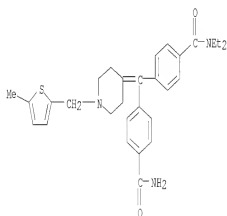
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piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-44-1

CMF C30 H35 N3 O2 S



CM 2

CRN 76-05-1

CMF C2 H F3 O2

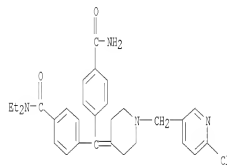


RN 798559-46-3 CAPLUS

CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(6-chloro-3-pyridinyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

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Print selected from 10541656.trn



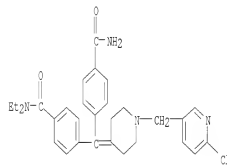
RN 798559-47-4 CAPLUS

CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-[(6-chloro-3-pyridinyl)methyl]-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-46-3

CMF C30 H33 Cl N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2



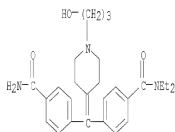
RN 798559-48-5 CAPLUS

CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(3-hydroxypropyl)-4-

Page 200

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piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



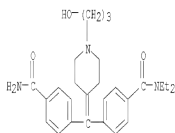
RN 798559-49-6 CASPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(3-hydroxypropyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:13) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-48-5

CMF C27 H35 N3 O3



CM 2

CRN 76-05-1

CMF C2 H F3 O2

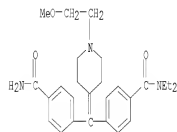


RN 798559-50-9 CASPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(2-methoxyethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

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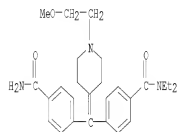
RN 798559-51-0 CASPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(2-methoxyethyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-50-9

CMF C27 H35 N3 O3



CM 2

CRN 76-05-1

CMF C2 H F3 O2

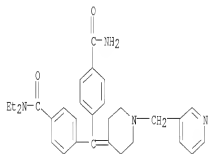


RN 798559-52-1 CASPLUS

CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

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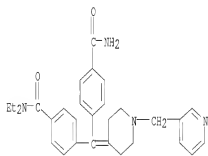
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RN 799559-53-2 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 799559-52-1
CMF C30 H34 N4 O2



CM 2

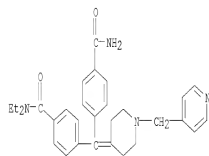
CRN 76-05-1
CMF C2 H F3 O2



RN 799559-54-3 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(4-methyl-2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, (CA INDEX NAME)

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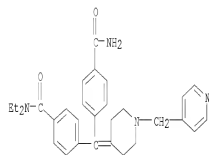
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RN 799559-55-4 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 799559-54-3
CMF C30 H34 N4 O2



CM 2

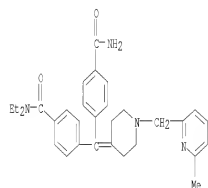
CRN 76-05-1
CMF C2 H F3 O2



RN 799559-56-5 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(6-methyl-2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, (CA INDEX NAME)

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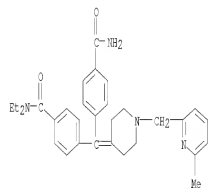
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RN 798559-57-6 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-[(6-methyl-2-pyridinyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-56-5
CMF C31 B36 W4 02



CM 2

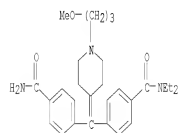
CRN 76-05-1
CMF C2 H F3 02



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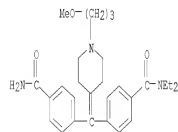
RN 798559-58-7 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(3-methoxypropyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-59-8 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(3-methoxypropyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 798559-58-7
CMF C28 H37 N3 03



CM 2

CRN 76-05-1
CMF C2 H F3 02

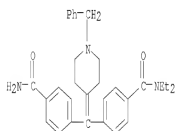


RN 798559-60-1 CAPLUS
CN Benzanide, 4-[[4-(aminocarbonyl)phenyl][1-(phenylmethyl)-4-

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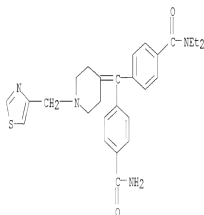
piperidinylidene)methyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HC1

RN 798559-61-2 CAPLUS

CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-62-3 CAPLUS

CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

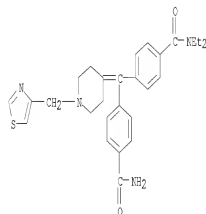
CM 1

CRN 798559-61-2

CMF C28 H32 N4 O2 S

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CM 2

CRN 76-05-1

CMF C2 H F3 O2

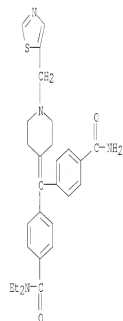


RN 798559-63-4 CAPLUS

CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene)methyl]-N,N-diethyl- (CA INDEX NAME)

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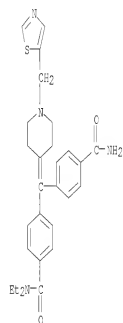
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RN 798559-64-5 CAPLUS
CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-63-4
CMP C28 H32 N4 O2 S



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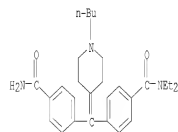
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CM 2

CRN 76-05-1
CMP C2 H F3 O2



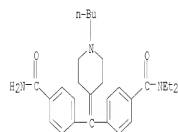
RN 798559-65-6 CAPLUS
CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-butyl-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)



RN 798559-66-7 CAPLUS
CM Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-butyl-4-piperidinylidene]methyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798559-65-6
CMP C28 H37 N3 O2



CM 2

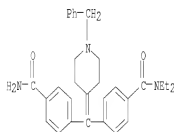
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CN 76-05-1
CMF C2 H F3 O2

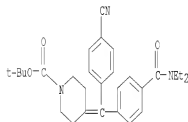


RN 798559-75-8 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



IT 798559-67-8P 798559-68-9P 798559-69-CP
798559-73-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

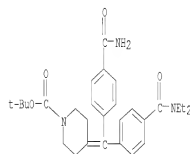
RN 798559-67-8 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-(4-cyanophenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



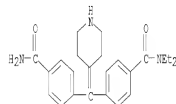
RN 798559-68-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-(aminocarbonyl)phenyl][4-[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

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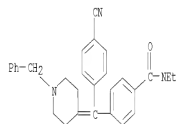
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RN 798559-69-0 CAPLUS
CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 798559-73-6 CAPLUS
CN Benzamide, 4-[[4-(4-cyanophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



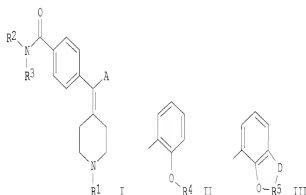
L11 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN
2004:1016014 Document No. 142:6427 Preparation of diarylmethylene piperidine derivatives as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders. Brown, William L.; Griffin, Andrew (Astrazeneca AB, Sued.; Astrazeneca UK Limited), PCT Int. Appl. WO 2004/01519 A1 2004/11/25, 56 pp. DESIGNATED STATES: W, AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CY, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GR, GU, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

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MD, MG, ME, MN, MM, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TN, TR, TT, TZ, UA, UG, US, UT, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BF, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: EIXMD2. APPLICATION: WO 2004-082052 20040513. PRIORITY: SE 2003-1441 20030516.

GI



AB The title compds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R3 = H, (un)substituted alkyl, cycloalkyl; A = II, III (wherein R4 = (un)substituted alkyl, cycloalkyl, aryl, etc.; R5 = (un)substituted arylene, heterocyclylene, cycloalkylene, alkylene; D = a bond, CH2, O, S, NH, etc.)] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; A = 2-(PhO)C6H4], starting from Me 4-(bromomethyl)benzoate, was given. Generally, for most of the compds. I the IC50 values towards human δ receptor are in the range of 0.32 nM to 1.58 nM. The pharmaceutical composition comprising the compound I is disclosed.

II 798562-19-3P 798562-20-6P 798562-21-7P
798562-22-8P 798562-23-3P 798562-28-4P
798562-27-5P 798562-38-6P 798562-39-7P
798562-40-0P 798562-41-1P 798562-42-2P
798562-43-3P 798562-44-4P 798562-45-5P
798562-46-6P 798562-47-7P 798562-48-8P

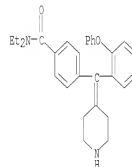
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 798562-19-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(2-phenoxypheyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

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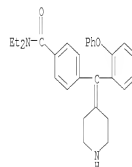
RN 798562-20-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(2-phenoxypheyl)-4-piperidinylidenemethyl]-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-19-3

CME C29 H32 N2 O2



CM 2

CRN 76-05-1

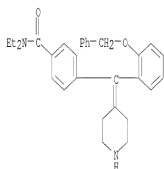
CME C2 H F3 O2



RN 798562-21-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[(2-(phenylmethoxy)phenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

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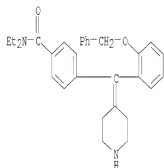
RN 798562-22-8 CAPLUS

CM Benzamide, N,N-diethyl-4-[[2-(phenylmethoxy)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-21-7

CMF C30 H34 N2 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2

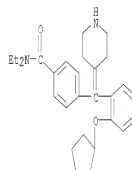


RN 798562-27-3 CAPLUS

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CM Benzamide, 4-[[2-(cyclopentyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



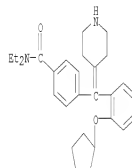
RN 798562-28-4 CAPLUS

CM Benzamide, 4-[[2-(cyclopentyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-27-3

CMF C28 H36 N2 O2



CM 2

CRN 76-05-1

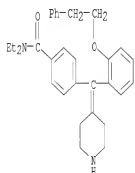
CMF C2 H F3 O2



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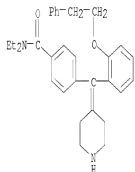
RN 798562-37-5 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-(2-phenylethoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798562-39-6 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-(2-phenylethoxy)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-37-5
 CMF C31 H36 N2 O2



CM 2

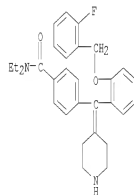
CRN 76-05-1
 CMF C2 H F3 O2



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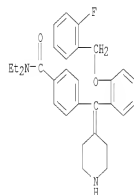
RN 798562-39-7 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-[(2-fluorophenyl)methoxy]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798562-40-0 CAPLUS
 CN Benzanide, N,N-diethyl-4-[[2-[(2-fluorophenyl)methoxy]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-39-7
 CMF C30 H33 F N2 O2



CM 2

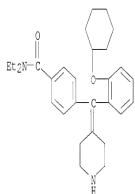
CRN 76-05-1
 CMF C2 H F3 O2

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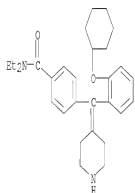
RN 798562-41-1 CAPLUS
CN Benzamide, 4-[[2-(cyclohexyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798562-42-2 CAPLUS
CN Benzamide, 4-[[2-(cyclohexyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-41-1
CMF C29 H38 N2 O2



CM 2

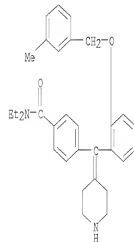
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CRN 76-05-1
CMF C2 H F3 O2



RN 798562-43-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-[(3-methylphenyl)methoxy]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



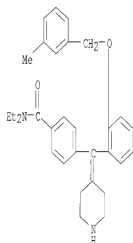
RN 798562-44-4 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-[(3-methylphenyl)methoxy]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-43-3
CMF C31 H36 N2 O2

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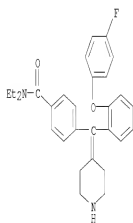


CM 2

CRM 76-05-1
CMF C2 H F3 O2



RN 798562-45-5 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-fluorophenoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



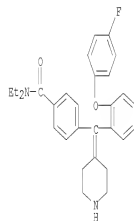
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RN 798562-46-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-fluorophenoxy)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:1) (9CI) (CA INDEX NAME)

CM 1

CRM 798562-45-5
CMF C29 H31 F 02



CM 2

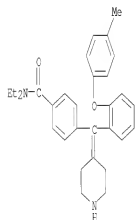
CRM 76-05-1
CMF C2 H F3 O2



RN 798562-47-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-methylphenoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

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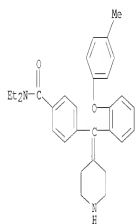
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RN 798562-49-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-methylphenoxy)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CEN 798562-47-7
CMP C30 H34 N2 O2



CM 2

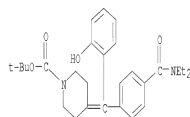
CEN 76-05-1
CMP C2 H F3 O2



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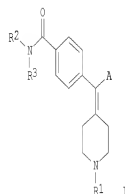
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IT 798562-49-9P
RL: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)
RN 798562-49-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](2-hydroxyphenyl)methyl]ene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



L11 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN
2004:1015891 Document No. 142:6425 Preparation of diarylmethylidene piperidine derivatives as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders. Brown, William L.; Griffin, Andrew (Astrazeneca AB, Swed.; Astrazeneca UK Limited). PCT Int. Appl. WO 2004/100952 A1 20041125, 59 pp. DESIGNATED STATES: A: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DL, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-GB2096 20040513. PRIORITY: SE 2003-1442 20030516.

GI



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AB The title compds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R3 = H, (un)substituted alkyl, cycloalkyl; A = alkoxyphenyl, aryloxyphenyl, cycloalkoxyphenyl, etc.] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; A = 2-(PhO)C6H4], starting from Me 4-(bromomethyl)benzoate, was given. The compds. I were found to be active toward human δ receptors. Generally, for most of the compds. I the IC50 values are in the range of 0.52 nM to 1.58 nM. The pharmaceutical composition comprising the compound I is disclosed.

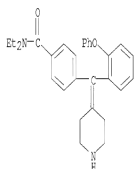
IT 798562-19-1P 798562-20-6P 798562-21-7P
798562-22-8P 798562-27-3P 798562-28-4P
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798562-33-1P 798562-34-2P 798562-35-3P
798562-36-4P 798562-37-5P 798562-38-6P
798562-39-7P 798562-40-0P 798562-41-1P
798562-42-2P 798562-43-3P 798562-44-4P
798562-45-5P 798562-46-6P 798562-47-7P
798562-48-8P

RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RI 798562-19-3 CAPLOS

CI Benzamide, N,N-diethyl-4-[(2-phenoxyphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



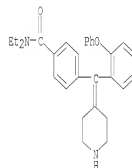
RI 798562-20-6 CAPLOS

CI Benzamide, N,N-diethyl-4-[(2-phenoxyphenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CI 1

CI 798562-19-3

CI C29 H32 N2 O2



CI 2

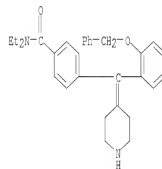
CI 76-05-1

CI C2 H F3 O2



RI 798562-21-7 CAPLOS

CI Benzamide, N,N-diethyl-4-[(2-(phenylmethoxy)phenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RI 798562-22-8 CAPLOS

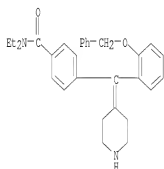
CI Benzamide, N,N-diethyl-4-[(2-(phenylmethoxy)phenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CI 1

CI 798562-21-7

CI C30 H34 N2 O2

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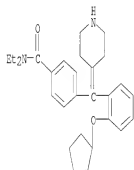
CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798562-27-3 CAPLUS

CN Benzamide, 4-[[2-(cyclopentyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 798562-29-4 CAPLUS

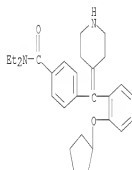
CN Benzamide, 4-[[2-(cyclopentyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

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Print selected from 10541656.trn

CRN 798562-27-3
CME C28 H36 N2 O2



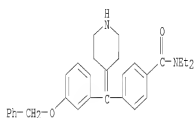
CM 2

CRN 76-05-1
CME C2 H F3 O2



RN 798562-29-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(phenylmethoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798562-30-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(phenylmethoxy)phenyl]-4-piperidinylidenemethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

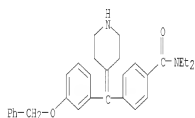
CM 1

CRN 798562-29-5

Page 228

Print selected from 10541656.trn

CMF C30 H34 N2 O2



CM 2

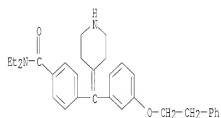
CRN 76-05-1

CMF C2 H F3 O2



RN 799562-31-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-(2-phenylethoxy)phenyl]-4-piperidinyldienemethyl]- (CA INDEX NAME)



RN 799562-33-1 CAPLUS

CN Benzamide, 4-[[3-(cyclopentyloxy)phenyl]-4-piperidinyldienemethyl]-N,N-diethyl-, trifluoroacetate (10:13) (9CI) (CA INDEX NAME)

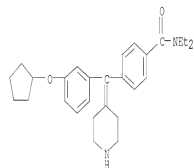
CM 1

CRN 799562-32-0

CMF C28 H36 N2 O2

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Print selected from 10541656.trn



CM 2

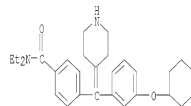
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CMF C2 H F3 O2



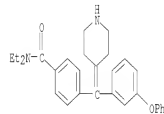
RN 799562-34-2 CAPLUS

CN Benzamide, 4-[[3-(cyclohexyloxy)phenyl]-4-piperidinyldienemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 799562-35-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-phenoxyphenyl)-4-piperidinyldienemethyl]- (CA INDEX NAME)



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Print selected from 10541656.trn

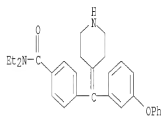
RN 798562-36-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-phenoxyphenyl)-4-piperidinidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-35-3

CMF C29 H32 N2 O2



CM 2

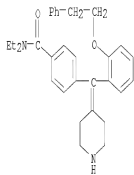
CRN 76-05-1

CMF C2 H F3 O2



RN 798562-37-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(2-phenylethoxy)phenyl]-4-piperidinidenemethyl]- (CA INDEX NAME)



RN 798562-38-6 CAPLUS

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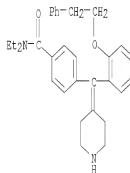
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CN Benzamide, N,N-diethyl-4-[[2-(2-phenylethoxy)phenyl]-4-piperidinidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-37-5

CMF C31 H36 N2 O2



CM 2

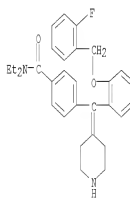
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CMF C2 H F3 O2



RN 798562-39-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(2-fluorophenyl)methoxy]phenyl]-4-piperidinidenemethyl]- (CA INDEX NAME)



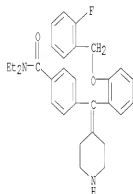
Page 232

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RN 798562-40-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[[2-[(2-fluorophenyl)methoxy]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-39-7
CMF C30 H33 F N2 O2



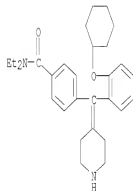
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798562-41-1 CAPLUS
CN Benzamide, 4-[[2-(cyclohexyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

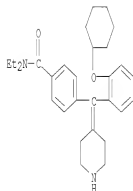
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RN 798562-42-2 CAPLUS
CN Benzamide, 4-[[2-(cyclohexyloxy)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-41-1
CMF C29 H39 N2 O2



CM 2

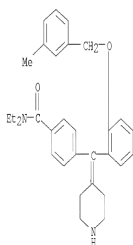
CRN 76-05-1
CMF C2 H F3 O2



RN 798562-43-3 CAPLUS

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CN Benzamide, N,N-diethyl-4-[[2-[(3-methylphenyl)methoxy]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



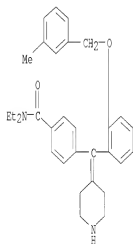
RN 798562-44-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[(3-methylphenyl)methoxy]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-43-3

CMF C31 H36 N2 O2



CM 2

CRN 76-05-1

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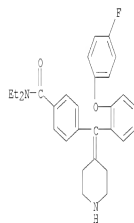
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CMF C2 H F3 O2



RN 798562-45-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[2-(4-fluorophenoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 798562-44-6 CAPLUS

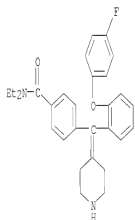
CN Benzamide, N,N-diethyl-4-[[2-(4-fluorophenoxy)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-45-5

CMF C29 H31 F3 N2 O2

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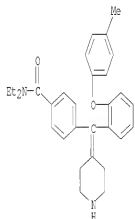


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 798562-47-7 CAFLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-methylphenoxy)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

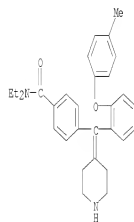


RN 798562-48-8 CAFLUS
CN Benzamide, N,N-diethyl-4-[[2-(4-methylphenoxy)phenyl]-4-

piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798562-47-7
CMF C30 H34 N2 O2



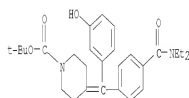
CM 2

CRN 76-05-1
CMF C2 H F3 O2



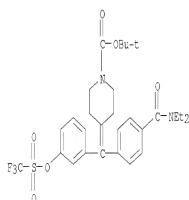
IT 692246-40-5P 692246-42-7P 798562-49-9P
798562-50-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)
RN 692246-40-5 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]-3-hydroxyphenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

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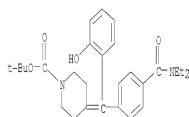
RN 692246-42-7 CAPUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-[[[trifluoromethyl]sulfonyl]oxy]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 799562-43-9 CAPUS

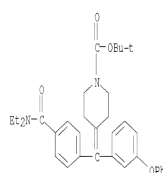
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][2-hydroxyphenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 799562-50-2 CAPUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-phenoxyphenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

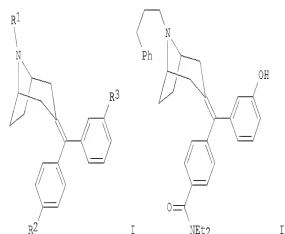
Print selected from 10541656.trn



111 ANSWER 12 OF 39 CAPUS COPYRIGHT 2008 ACS on STN

2004:902375 Document No. 141:379815 3-Benzhydrylidene-9-azabicyclo[3.2.1]octane derivatives with opioid receptor activity and their preparation, pharmaceutical compositions, and uses. Liras, Spiros (Pfizer Products Inc., USA). PCT Int. Appl. WO 2004/092165 A1 20041028, 43 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LR, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GE, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). COORD: PEXX02. APPLICATION: WO 2004-1B1169 20040405. PRIORITY: US 2003-462896P 20030415.

GI



AB The invention relates to compds. I, which are opioid receptor ligands (no data) wherein R1 is H, (C1-C9)alkoxy-(C1-C9)alkyl- (with a C2-9 total), aryl, aryl-(C1-C9)alkyl-, heteroaryl, heteroaryl-(C1-C9)alkyl-, heterocyclic, heterocyclic-(C1-C9)alkyl-, (C3-C7)cycloalkyl-, or (C3-C7)cycloalkyl-(C1-C9)alkyl-; R2 is H, aryl, heteroaryl, heterocyclic,

-802R4, -C0R4, -C0NR5R6, -C0OR4, or -C(OH)R5R6 wherein each of R4, R5, and R6 is independently defined as RI is defined above; or R5 and R6, together with the C or N to which they are both attached, form a 3- to 7-membered saturated ring containing 0-3 N/O/S heteroatoms; R3 is OH, -H5SO2R7,

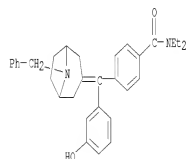
-C(OH)R7R8,

F, or -C0NR7, wherein R7 and R8 are the same or different and are selected from H, (C1-C4)alkyl, (C1-C4)alkoxy, and (C1-C4)alkoxy-(C1-C4)alkyl- (with a C2-4 total); and wherein any of the alkyl moieties of R7 and R8 may optionally be substituted with 0-7 F atoms; and pharmaceutically acceptable salts; with the proviso that there are no two adjacent ring O atoms and no ring O atom adjacent to either a ring N atom or a ring S atom in any of the heterocyclic or heteroaryl moieties. The invention also relates to pharmaceutical compositions containing I, and to the use of I to treat neural and gastrointestinal disorders. Specifically, I are useful for treating inflammatory diseases such as arthritis, psoriasis, asthma, or inflammatory bowel disease, disorders of respiratory function such as asthma, cough and apnea, allergies, gastrointestinal disorders such as gastritis, functional bowel disease, irritable bowel syndrome, functional diarrhea, functional distension, functional pain, nonulcerogenic dyspepsia and other disorders of motility or secretion, emesis, stroke, shock, brain edema, head trauma, spinal cord trauma, cerebral ischemia, cerebral deficits subsequent to cardiac bypass surgery and grafting, urogenital tract disorders such as urinary incontinence, chemical dependencies and addictions, chronic pain, nonsomatic pain, acute pain and neurogenic pain, systemic lupus erythematosus, Hodgkin's disease, Sjogren's disease, epilepsy and rejection in organ transplants and skin grafts. Approx. 40 invention compounds and several intermediates were prepared. For instance, N-benzyltropinone was treated with TOSMIC to convert the carbonyl to the corresponding 3-carbonitrile. This compound underwent a sequence of: (1) nitrile coupling with lithiated 4-bromo-N,N-dimethylbenzamide to give a tertiary alc., (3) dehydration of the alc. with concomitant demethylation using HBr in AcOH, (4) hydrogenolytic debenzylation of the bridge amino group, and (5) reductive amination of amino with NaBH(OAc)3 and the corresponding aldehyde, to give, e.g., invention compound II.

II 782451-19-8E, 4-[(8-Benzyl-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide hydrochloride
782451-20-1P, 4-[(8-Azabicyclo[3.2.1]oct-3-ylidene)-(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide hydrochloride
RI: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOI (Biological study); PREP (Preparation); RACT (Reactant or reagent); USDS (Uses)
(drug candidate; preparation of benzhydryleneazabicyclooctane derivs. with opiod receptor activity)

RN 782451-19-8 CAPLUS

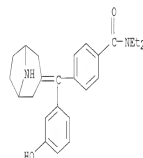
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(phenylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● 9CI

RN 782451-20-1 CAPLUS

CN Benzamide, 4-[(8-Azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● 9CI

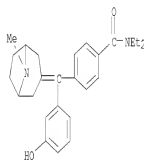
II 705279-39-6P, N,N-Diethyl-4-[(3-hydroxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzamide 782450-44-6P, 4-[(8-Benzyl-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-46-6P, 4-[(8-Azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-48-0P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(3-phenylpropyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzamide 782450-50-4P, 4-[(8-(3-Chlorobenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-52-6P, 4-[(8-(4-Chlorobenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-54-6P, N,N-Diethyl-4-[(3-hydroxyphenyl)(8-phenethyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzamide 782450-56-0P, 4-[(8-(2-Chlorobenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-58-2P, 4-[(8-(Benzo[1,3]dioxol-5-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)(3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-60-6P, N,N-Diethyl-4-[(3-

hydroxyphenyl][8-(4-methylbenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-62-8P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(3-methylbenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-63-9P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(4-methoxybenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-64-0P, N,N-Diethyl-4-[(8-(3-fluorobenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]benzamide 782450-66-2P, N,N-Diethyl-4-[(8-(4-fluorobenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]benzamide 782450-68-4P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(2-(trifluoromethyl)benzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-70-6P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(4-methoxy-3-methylbenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-72-0P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(4-methylsulfonylbenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-74-2P, 4-[8-(3-(4-chlorophenyl)benzyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-76-4P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(4-phenoxybenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-78-6P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(4-isopropylbenzyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-80-0P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(thiophen-2-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-82-2P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(1-methyl-1H-pyrazol-2-yl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-84-4P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(quinolin-3-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-86-6P, N,N-Diethyl-4-[(8-(furan-3-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]benzamide 782450-88-8P, N,N-Diethyl-4-[(3-hydroxyphenyl)[8-(quinolin-4-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzamide 782450-90-2P, 4-[8-(Cyclohex-3-enylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782450-92-4P, 2-[3-[4-(Diethylcarbamoyl)phenyl](3-hydroxyphenyl)methylene]-8-azabicyclo[3.2.1]oct-8-yl)methyl]cyclopropanecarboxylic acid ethyl ester 782450-94-6P, 4-[(8-Allyl-8-azabicyclo[3.2.1]oct-3-ylidene)](3-methoxyphenyl)methyl]-N,N-diethylbenzamide 782450-96-8P, 4-[8-(Cyclopropylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-methoxyphenyl)methyl]-N,N-diethylbenzamide 782451-09-6P, 4-[(8-Allyl-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]-N,N-diethylbenzamide 782451-11-0P, 4-[8-(Cyclopropylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)](3-hydroxyphenyl)methyl]-N,N-diethylbenzamide

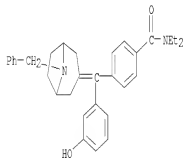
RL: PAC (Pharmacological activity); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzhydrylideneazabicyclooctane derivs. with opioid receptor activity)

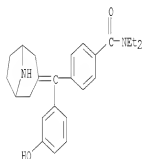
RN 705279-39-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 782450-44-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(8-phenylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

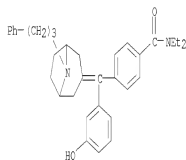


RN 782450-46-8 CAPLUS
CN Benzamide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



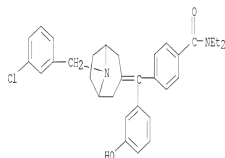
RN 782450-48-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(8-(3-phenylpropyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

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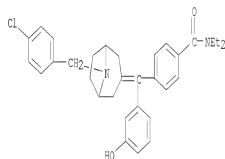
RN 782450-50-4 CAPLUS

CN Benzamide, 4-[[8-[(3-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]-(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 782450-52-6 CAPLUS

CN Benzamide, 4-[[8-[(4-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]-(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

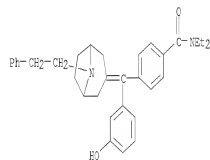


RN 782450-54-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

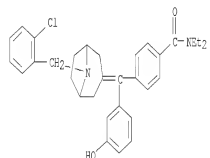
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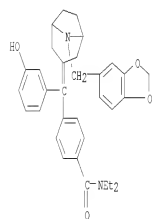
RN 782450-56-0 CAPLUS

CN Benzamide, 4-[[8-[(2-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]-(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 782450-58-2 CAPLUS

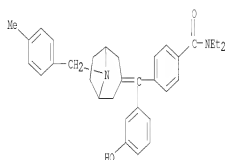
CN Benzamide, 4-[[8-[(1,3-benzodioxol-5-yl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]-(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 782450-60-6 CAPLUS

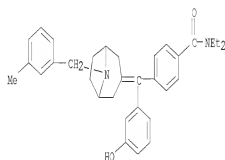
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-methylphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

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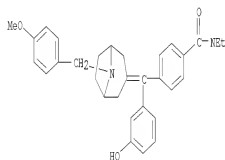
RN 782450-62-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(3-methylphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)



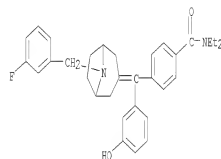
RN 782450-63-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-methoxyphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)



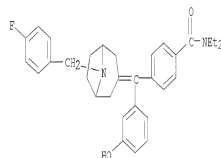
RN 782450-64-0 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-fluorophenyl)[8-[(4-methoxyphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)



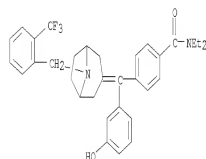
RN 782450-66-2 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-fluorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)



RN 782450-68-4 CAPLUS

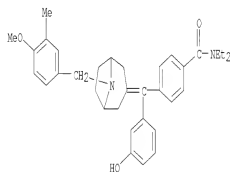
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(2-(trifluoromethyl)phenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)



RN 782450-70-9 CAPLUS

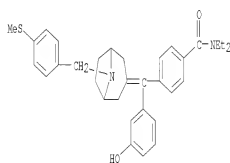
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-methoxy-3-methylphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl- (CA INDEX NAME)

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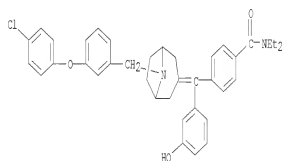
RN 782450-72-0 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-methylthio)phenyl]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 782450-74-2 CAPLUS

CN Benzanide, 4-[[8-[[3-(4-chlorophenoxy)phenyl]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene](3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

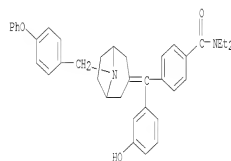


RN 782450-76-4 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(4-phenoxyphenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

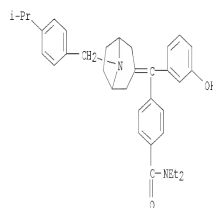
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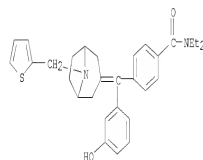
RN 782450-78-6 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(1-methylethyl)phenyl]methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 782450-80-0 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



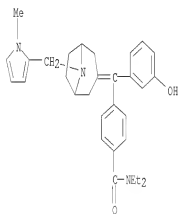
RN 782450-82-2 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-[(1-methyl-1H-pyrrol-2-

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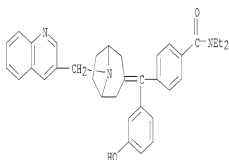
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yl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



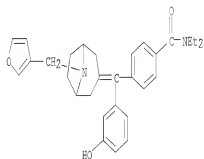
RN 782450-84-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(3-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 782450-86-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)[3-hydroxyphenyl)methyl]- (CA INDEX NAME)

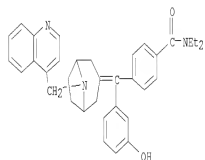


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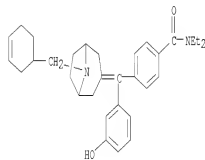
RN 782450-88-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(4-quinolinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



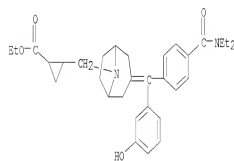
RN 782450-90-2 CAPLUS

CN Benzamide, 4-[[8-(3-cyclohexen-1-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)[3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 782450-92-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[[3-[[4-[(diethylamino)carbonyl]phenyl][3-hydroxyphenyl]methylene]-8-azabicyclo[3.2.1]oct-8-yl)methyl]-, ethyl ester (CA INDEX NAME)

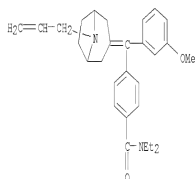


RN 782450-94-6 CAPLUS

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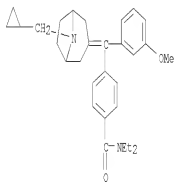
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CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



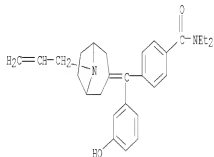
RN 782450-96-8 CAPLUS

CN Benzamide, 4-[[8-(cyclopropylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene](3-methoxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 782451-09-6 CAPLUS

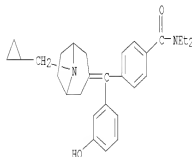
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



Print selected from 10541656.trn

RN 782451-11-0 CAPLUS

CN Benzamide, 4-[[8-(cyclopropylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene](3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

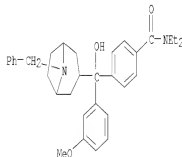


IT 782450-42-42, 4-[(8-Benzyl-8-azabicyclo[3.2.1]oct-3-yl)hydroxy(3-methoxyphenyl)methyl]-N,N-diethylbenzamide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzhydrylideneazabicyclooctane derivs. with opioid receptor activity)

RN 782450-42-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[hydroxy(3-methoxyphenyl)[8-(phenylmethyl)-8-azabicyclo[3.2.1]oct-3-yl]methyl]- (CA INDEX NAME)

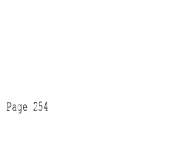


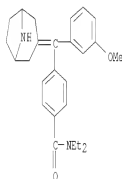
IT 782451-22-3, 4-[(8-Azabicyclo[3.2.1]oct-3-ylidene)(3-methoxyphenyl)methyl]-N,N-diethylbenzamide

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of benzhydrylideneazabicyclooctane derivs. with opioid receptor activity)

RN 782451-22-3 CAPLUS

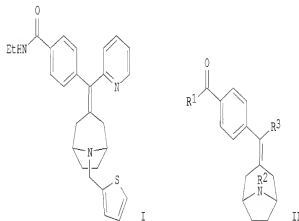
CN Benzamide, 4-[[8-azabicyclo[3.2.1]oct-3-ylidene(3-methoxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)





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 2004:863091 Document No. 142:56149 Parallel methods for the preparation and SAR exploration of *N*-ethyl-4-[(8-alkyl-8-aza-bicyclo[3.2.1]oct-3-ylidene)-aryl-methyl]-benzamidates, powerful μ and δ -opioid agonists. Coats, Steven J.; Schulz, Mark J.; Carson, John R.; Caddy, Ellen E.; Elasta, Dennis J.; Pittis, Philip M.; Stone, Dennis J., Jr.; Zhang, Sui-Po; Colburn, Ray W.; Dax, Scott L. (Johnson and Johnson Pharmaceutical Research and Development, L.L.C., Drug Discovery, Spring House, PA, 15477-0776, USA). *Bioorganic & Medicinal Chemistry Letters*, 14(22), 5493-5498 (English) 2004. CODEN: BMLB. ISSN: 0960-894X. Publisher: Elsevier B.V..

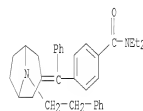
GI



AB Libraries of azabicyclooctylidenemethylbenzamidates such as I are prepared as μ - and δ -opioid agonists using solid-phase and solution-phase methods; qual. relationships between the structures of azabicyclooctylidenemethylbenzamidates and their μ - and δ -opioid agonist activities are discussed. 4-(Methoxycarbonyl)benzyl bromide is converted to di-Me 4-(methoxycarbonyl)benzylphosphonate with tri-Me phosphite; base-mediated olefination of *N*-(ethoxycarbonyl)tropane, bromination and base treatment, and cleavage of the Et carbonate followed by replacement

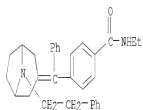
with an Fmoc moiety yields the intermediate (carboxyphenylbromomethylene)azabicyclooctanecarboxylate II ($R = H$; $R_1 = Br$; $R_2 = Fmoc$). Attachment of II ($R = H$; $R_1 = Br$; $R_2 = Fmoc$) to a resin-bound ethylamine yields a solid-phase intermediate which undergoes piperidine-mediated deprotection of the Fmoc group, reductive amination with aldehydes, palladium-catalyzed Suzuki coupling with aryl- or heteroarylboronic acids, and trifluoroacetic acid deprotection to yield azabicyclooctylidenemethylbenzamidates. Coupling of II ($R = H$; $R_1 = Br$; $R_2 = Fmoc$) to ethylamine and deprotection yields intermediate II ($R = EtNH$; $R_1 = Br$; $R_2 = H$); microwave-mediated reductive amination of II ($R = EtNH$; $R_1 = Br$; $R_2 = H$) with aldehydes and sodium triacetoxyborohydride, quenching with water, and microwave-mediated Suzuki coupling in the presence of tetrakis(triphenylphosphine)palladium yields azabicyclooctylidenemethylbenzamidates. Azabicyclooctylidenemethylbenzamidates substituted with a wide variety of aryl groups at the methylene carbon are effective as μ - and δ -opioid agonists. Small substituents at the nitrogen of the azabicyclooctyl ring in azabicyclooctylidenemethylbenzamidates are preferred for good μ - and δ -opioid agonist activity; basic and acidic substituents decrease activity (although the effects of basic groups can be mitigated by appropriate aryl substitution at the methylene carbon). I has K_i values of 6.0 nM for the μ -opioid receptor and 3.8 nM for the δ -opioid receptor and is an effective oral antinociceptive agent at a dose of 150 μ mol/kg in a 48° mouse hot plate test.

IT 359862-85-4P 359862-90-1P 809275-33-OP
 809275-34-1P 809275-35-2P 809275-36-3P
 809275-37-4P
 RI: CPN (Combinatorial preparation); PAC (Pharmacological activity); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation) (parallel solid-phase synthesis of azabicyclooctylidenemethylbenzamidates as μ - and δ -opioid agonists)
 RN 359862-85-4 CAPLUS
 CN Benzamide, *N,N*-diethyl-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

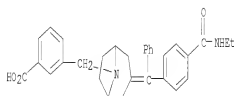


RN 359862-90-1 CAPLUS
 CN Benzamide, *N*-ethyl-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)

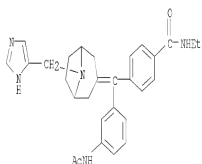
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RN 809275-33-0 CAPLUS
CN Benzoic acid, 5-[[3-[[4-[(ethylamino)carbonyl]phenyl]phenylmethylene]-8-azabicyclo[3.2.1]oct-8-yl]methyl]- (CA INDEX NAME)

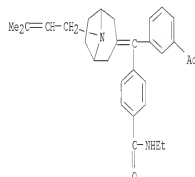


RN 809275-34-1 CAPLUS
CN Benzoamide, 4-[[3-(acetylamino)phenyl][8-(1H-imidazol-4-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (9CI) (CA INDEX NAME)

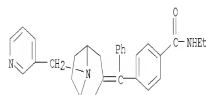


RN 809275-35-2 CAPLUS
CN Benzoamide, 4-[[3-(acetylamino)phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (9CI) (CA INDEX NAME)

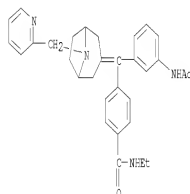
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RN 809275-36-3 CAPLUS
CN Benzoamide, N-ethyl-4-[phenyl[8-(3-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-37-4 CAPLUS
CN Benzoamide, 4-[[3-(acetylamino)phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



IT 809275-38-5 809275-41-0 809275-43-2
809275-44-3 809275-45-4 809275-47-6
809275-48-7 809275-49-8 809275-55-6
809275-56-7 809275-57-8 809275-59-0
809275-60-3 809275-61-4 809275-62-5
809275-63-6 809275-64-7 809275-65-8

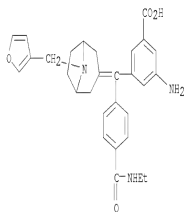
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810671-68-2 810671-69-3 810671-70-6
810671-71-7 810671-72-8 810671-73-9
810671-74-0 810671-75-1

RL: PAC (Pharmacological activity); BIOL (Biological study)
(parallel synthesis of azabicyclooctylidenemethylbenzamidates as μ -
and δ -opioid agonists by solid- and solution-phase methods)

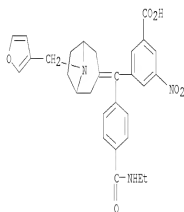
RN 809275-38-5 CAPLUS

CN Benzoic acid, 3-amino-5-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-41-0 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-5-nitro- (CA INDEX NAME)

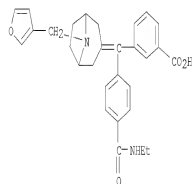


RN 809275-43-2 CAPLUS

CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

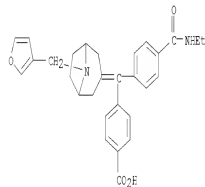
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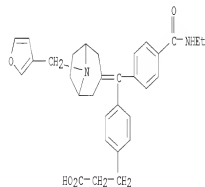
RN 809275-44-3 CAPLUS

CN Benzoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-45-4 CAPLUS

CN Benzenepropanoic acid, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

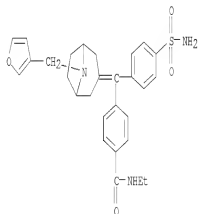


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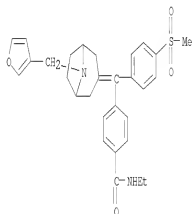
RN 809275-47-6 CAPLUS

CN Benzamide, 4-[[4-(aminosulfonyl)phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-48-7 CAPLUS

CN Benzamide, N-ethyl-4-[[8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][4-(methylsulfonyl)phenyl]methyl]- (CA INDEX NAME)



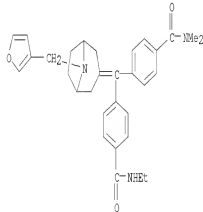
RN 809275-49-8 CAPLUS

CN Benzamide, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N,N-dimethyl- (CA INDEX NAME)



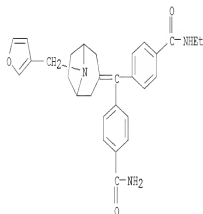
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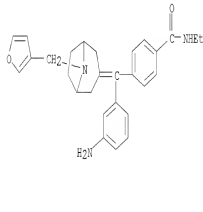
RN 809275-55-6 CAPLUS

CN Benzamide, 4-[[4-(aminocarbonyl)phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-56-7 CAPLUS

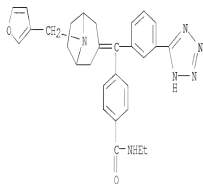
CN Benzamide, 4-[[[3-aminophenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



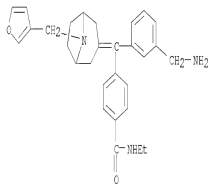
Page 262

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RN 809275-57-8 CAPLUS
CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-(1H-tetrazol-5-yl)phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 809275-59-0 CAPLUS
CN Benzanide, 4-[[[3-(aminomethyl)phenyl][8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

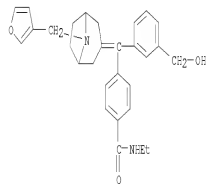


RN 809275-60-3 CAPLUS
CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-(hydroxymethyl)phenyl]methyl]- (CA INDEX NAME)

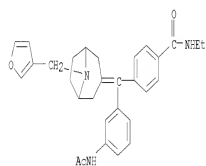


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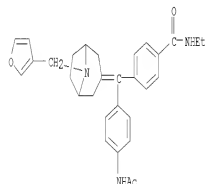
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RN 809275-61-4 CAPLUS
CN Benzanide, 4-[[[3-(acetylamino)phenyl][8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-62-5 CAPLUS
CN Benzanide, 4-[[[4-(acetylamino)phenyl][8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

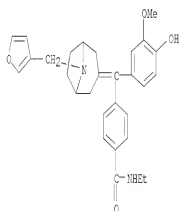


RN 809275-63-6 CAPLUS
CN Benzanide, N-ethyl-4-[[8-(3-furanyl)methyl]-8-azabicyclo[3.2.1]oct-3-

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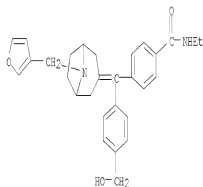
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ylidene)[4-hydroxy-3-methoxyphenyl]methyl]- (CA INDEX NAME)



RN 809275-64-7 CAPLUS

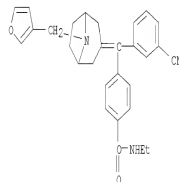
CN Benzamide, N-ethyl-4-[[8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene][4-(hydroxymethyl)phenyl]methyl]- (CA INDEX NAME)



RN 809275-65-8 CAPLUS

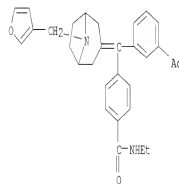
CN Benzamide, 4-[[3-cyanophenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)

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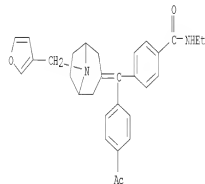
RN 809275-66-9 CAPLUS

CN Benzamide, 4-[[3-acetylphenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-67-0 CAPLUS

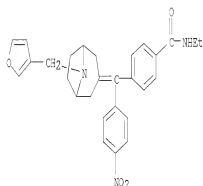
CN Benzamide, 4-[[4-acetylphenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-69-2 CAPLUS

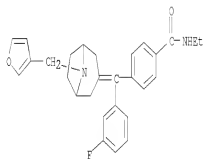
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CN Benzanide, N-ethyl-4-[[8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene](4-nitrophenyl)methyl]- (CA INDEX NAME)



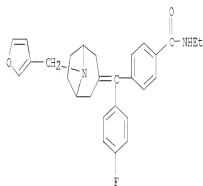
RN 809275-71-6 CAPLUS

CN Benzanide, N-ethyl-4-[[3-(3-fluorophenyl)][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 809275-72-7 CAPLUS

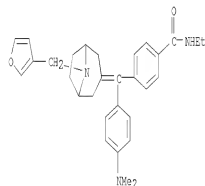
CN Benzanide, N-ethyl-4-[[4-(4-fluorophenyl)][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



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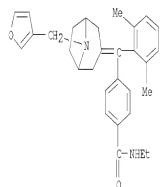
RN 809275-73-8 CAPLUS

CN Benzanide, 4-[[4-(dimethylamino)phenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 809275-74-9 CAPLUS

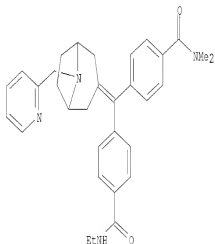
CN Benzanide, 4-[[2,6-dimethylphenyl][8-(3-furanylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl- (CA INDEX NAME)



RN 810671-66-0 CAPLUS

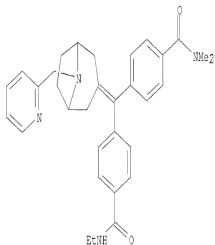
CN Benzanide, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N,N-dimethyl-, stereoisomer (CA INDEX NAME)

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RN 810671-67-1 CAPLUS

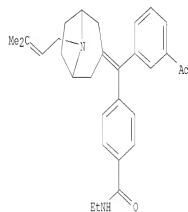
CN Benzanide, 4-[[4-[(ethylamino)carbonyl]phenyl][8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N,N-dimethyl-, stereoisomer (CA INDEX NAME)



RN 810671-68-2 CAPLUS

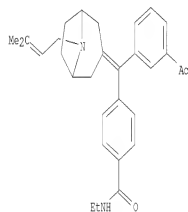
CN Benzanide, 4-[[3-acetylphenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl-, stereoisomer (9CI) (CA INDEX NAME)

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RN 810671-69-3 CAPLUS

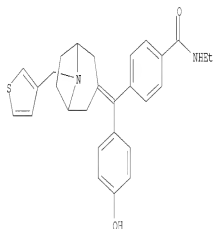
CN Benzanide, 4-[[3-acetylphenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-ethyl-, stereoisomer (9CI) (CA INDEX NAME)



RN 810671-70-6 CAPLUS

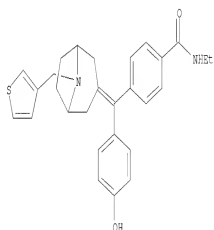
CN Benzanide, N-ethyl-4-[[4-(4-hydroxyphenyl)[8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, stereoisomer (CA INDEX NAME)

Print selected from 10541656.trn



RN 810671-71-7 CASUS

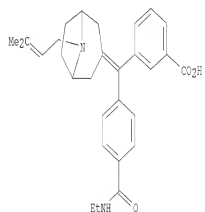
CN Benzamide, N-ethyl-4-[(4-hydroxyphenyl)[8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, stereoisomer (CA INDEX NAME)



RN 810671-72-8 CASUS

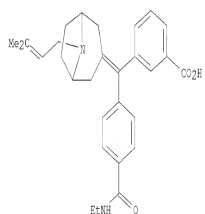
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, stereoisomer (9CI) (CA INDEX NAME)

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RN 810671-73-9 CASUS

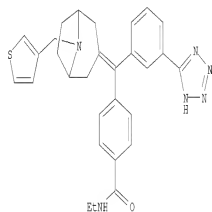
CN Benzoic acid, 3-[[4-[(ethylamino)carbonyl]phenyl][8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, stereoisomer (9CI) (CA INDEX NAME)



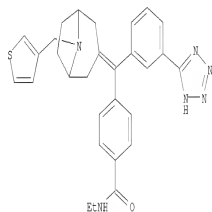
RN 810671-74-0 CASUS

CN Benzamide, N-ethyl-4-[[[3-(1H-tetrazol-5-yl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, stereoisomer (9CI) (CA INDEX NAME)

Print selected from 10541636.trn



RN 810671-75-1 CAELUS
CN Benzamide, N-ethyl-4-[[3-[(18-tetrazol-5-yl)phenyl][8-(3-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, stereoisomer (9CI) (CA INDEX NAME)



111 ANSWER 14 OF 39 CAELUS COPYRIGHT 2008 ACS ON STM
2004:857566 Document No. 141:332065 Preparation of diarylmethylidene piperidine derivatives as δ -receptor ligands for use in the treatment of, e.g., pain. Brown, William; Griffin, Andrew Mark (Astrazeneca Ab, Swed.). PCT Int. Appl. NO 2004097663 A1 20041014, 56 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GR, HR, HU, ID, IL, IN, IS, JP, KG, KH, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NI, NO, NZ, OM, PG, PE, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, SV, SY, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BG, CH, CO, CE, CI, CM, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG; TR. (English). CODEN: PEXMD2. APPLICATION: NO 2004-58504 20040401. PRIORITY: SE 2003-397 20030403.

GT

Print selected from 10541636.trn

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = H, alkoxy, alkyl, etc.; n, m = 0-2; R2-4 = H, alkyl, cycloalkyl, etc.; R5-6 = NO2, alkoxy, Cl, Br, etc.; R7 = alkyl, cycloalkyl, etc.] are prepared. For instance, 4-[[3-[(anilinoacetyl)phenyl][piperidin-4-ylidene)methyl]-N,N-diethylbenzamide (II) was prepared in 7 steps from 4-(bromomethyl)benzoic acid Me ester, N-Boc-4-piperidinone, diethylamine, 3-carboxyphenylboronic acid and aniline. Compds. of the invention have IC50 of 0.36-9.73 nM for the δ -receptor and IC50 of 1600-9000 nM and 86-8700 nM for the κ and μ -receptors resp. I are particularly useful in the management of pain.

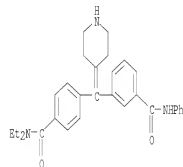
IT 769930-47-4P 769930-48-5P 769930-51-0P
769930-52-1P 769930-55-4P 769930-56-5P
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769930-61-2P 769930-63-4P 769930-64-5P
769930-66-7P 769930-67-8P 769930-69-0P
769930-70-3P 769930-72-5P 769930-73-6P
769930-74-7P 769930-75-8P 769930-77-0P
769930-78-1P 769930-81-6P 769930-82-7P
769930-84-9P 769930-85-0P 769930-87-2P
769930-88-3P 769930-90-7P 769930-91-8P
769930-92-9P 769930-93-0P

RU: PMC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidine derivs. as δ -receptor ligands for use in treatment of, e.g., pain)

RN 769930-47-4 CAELUS

CN Benzamide, N,N-diethyl-4-[[3-[(phenylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

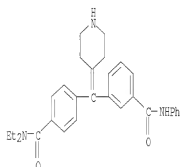


RN 769930-48-5 CAELUS
CN Benzamide, N,N-diethyl-4-[[3-[(phenylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

Print selected from 10541656.trn

CRN 769930-47-4
CMF C30 H33 N3 O2

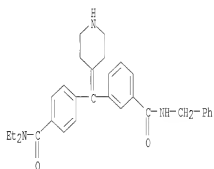


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769930-51-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



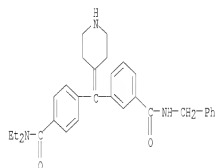
RN 769930-52-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

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Print selected from 10541656.trn

CM 1

CRN 769930-51-0
CMF C31 H35 N3 O2

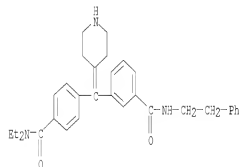


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769930-55-4 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(2-phenylethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 769930-56-5 CAPLUS

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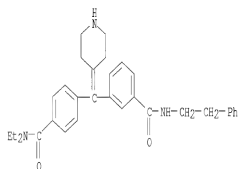
Print selected from 10541656.trn

CN Benzamide, N,N-diethyl-4-[[[3-[(2-phenylethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-55-4

CMF C52 E37 N3 O2



CM 2

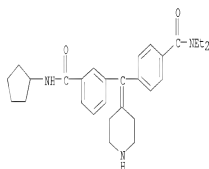
CRN 76-05-1

CMF C2 H F3 O2



RN 769930-57-6 CAPLUS

CN Benzamide, 4-[[[3-[(cyclopentylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



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Print selected from 10541656.trn

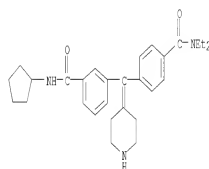
RN 769930-58-7 CAPLUS

CN Benzamide, 4-[[[3-[(cyclopentylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-57-6

CMF C29 H37 N3 O2



CM 2

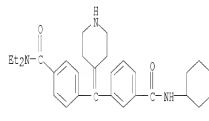
CRN 76-05-1

CMF C2 H F3 O2



RN 769930-60-1 CAPLUS

CN Benzamide, 4-[[[3-[(cyclohexylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



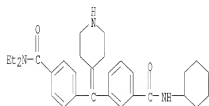
Page 278

Print selected from 10541656.trn

RN 769930-61-2 CAPLUS
CN Benzamide, 4-[[3-[(cyclohexylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-60-1
CMF C30 H39 N3 O2

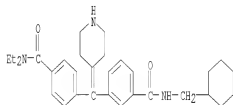


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769930-63-4 CAPLUS
CN Benzamide, 4-[[3-[(cyclohexylmethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



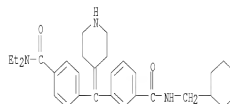
RN 769930-64-5 CAPLUS
CN Benzamide, 4-[[3-[(cyclohexylmethyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

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Print selected from 10541656.trn

CM 1

CRN 769930-63-4
CMF C31 H41 N3 O2

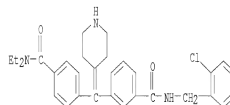


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769930-66-7 CAPLUS
CN Benzamide, 4-[[3-[[[[(2-chlorophenyl)methyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



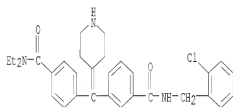
RN 769930-67-8 CAPLUS
CN Benzamide, 4-[[3-[[[[(2-chlorophenyl)methyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-66-7
CMF C31 H34 Cl N3 O2

Page 280

Print selected from 10541656.trn

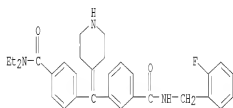


CM 2

CFW 76-05-1
CMF C2 H F3 O2



RN 769930-69-0 CAMELUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(2-fluorophenyl)methyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



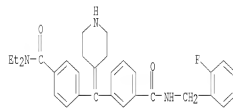
RN 769930-70-3 CAMELUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(2-fluorophenyl)methyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CFW 769930-69-0
CMF C31 H34 F N3 O2

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Print selected from 10541656.trn



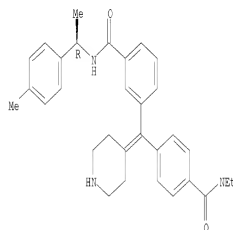
CM 2

CFW 76-05-1
CMF C2 H F3 O2



RN 769930-72-5 CAMELUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(1R)-1-(4-methylphenyl)ethyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 769930-73-6 CAMELUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(1R)-1-(4-methylphenyl)ethyl]amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

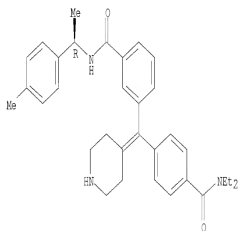
CM 1

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Print selected from 10541656.trn

CRN 769930-72-5
CMP C33 H39 N3 O2

Absolute stereochemistry.

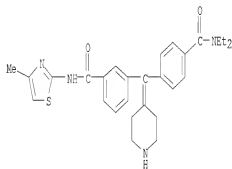


CM 2

CRN 76-05-1
CMP C2 H F3 O2



RN 769930-74-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(4-methyl-2-thiazolyl)amino]carbonyl]phenyl]-4-piperidinyldienemethyl]- (CA INDEX NAME)



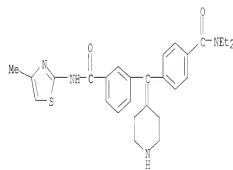
Page 283

Print selected from 10541656.trn

RN 769930-75-8 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(4-methyl-2-thiazolyl)amino]carbonyl]phenyl]-4-piperidinyldienemethyl]-, trifluoroacetate (5:12) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-74-7
CMP C28 H32 N4 O2 S

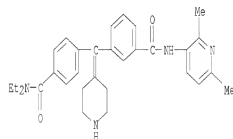


CM 2

CRN 76-05-1
CMP C2 H F3 O2



RN 769930-77-0 CAPLUS
CN Benzamide, 4-[[3-[(2,6-dimethyl-3-pyridinyl)amino]carbonyl]phenyl]-4-piperidinyldienemethyl]-N,N-diethyl- (CA INDEX NAME)



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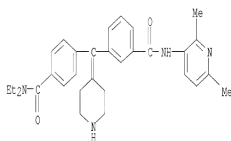
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RN 769910-78-1 CAPLUS
 CN Benzamide, 4-[[3-[[[(2,6-dimethyl-3-pyridinyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, tris(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-77-0

CMF C31 H36 N4 O2



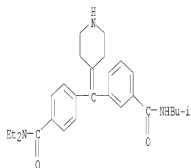
CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 769910-81-6 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[3-[[[(2-methylpropyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



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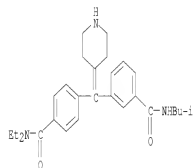
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RN 769910-82-7 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[3-[[[(2-methylpropyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:13) (9CI) (CA INDEX NAME)

CM 1

CRN 769930-81-6

CMF C28 H37 N3 O2



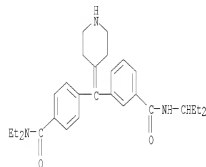
CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 769910-84-9 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[3-[[[(1-ethylpropyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



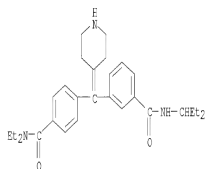
Page 286

Print selected from 10541656.trn

RN 769910-85-0 CAPLUS
CN Benzanide, N,N-diethyl-4-[[3-[[[(1-ethylpropyl)amino]carbonyl]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 769910-84-9
CMF C29 E39 W3 O2

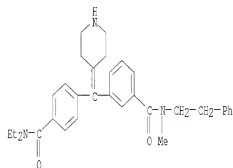


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769910-87-2 CAPLUS
CN Benzanide, 3-[[4-[[[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N-methyl-N-(2-phenylethyl)-, (CA INDEX NAME)



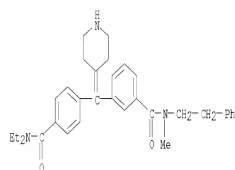
Page 287

Print selected from 10541656.trn

RN 769910-88-3 CAPLUS
CN Benzanide, 3-[[4-[[[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]-N-methyl-N-(2-phenylethyl)-, trifluoroacetate (5:12) (9CI) (CA INDEX NAME)

CM 1

CRN 769910-87-2
CMF C33 E39 W3 O2

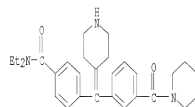


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769910-90-7 CAPLUS
CN Benzanide, N,N-diethyl-4-[[3-(1-piperidinylcarbonyl)phenyl]-4-piperidinylidenemethyl]-, (CA INDEX NAME)



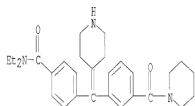
Page 288

Print selected from 10541656.trn

RN 769910-91-8 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-(1-piperidinylcarbonyl)phenyl)-4-piperidinyldienemethyl]-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 769910-90-7
CMF C29 H37 N3 O2

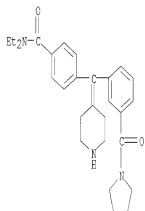


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 769910-92-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-piperidinyldiene[3-(1-pyrrolidinylcarbonyl)phenyl]methyl)]- (CA INDEX NAME)



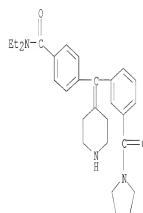
Page 289

Print selected from 10541656.trn

RN 769910-93-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-piperidinyldiene[3-(1-pyrrolidinylcarbonyl)phenyl]methyl)]-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 769910-92-9
CMF C29 H35 N3 O2



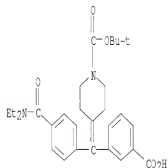
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT 510223-80-1P
RL: RCT (Reactant); SPH (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylidene piperidine derivs. as δ -receptor ligands for use in treatment of, e.g., pain)
RN 510223-80-1 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[(3-carboxyphenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1-[1,1-dimethylethyl] ester (CA INDEX NAME)

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111 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2008 ACS ON STM
 2004:610034 Document No. 141:140326 Preparation of diarylmethylidene
 piperidines as δ -opioid receptor ligands for the treatment of pain.
 Brown, William; Griffin, Andrew; Walpole, Christopher (Astrazeneca Ab,
 Sued., Astrazeneca UK Limited). PCT Int. Appl. No 2004/42562 A2 20040729,
 60 pp. DESIGNATED STATES: W: AE, AG, AG, AG, AL, AM, AM, AM, AT, AT, AU,
 AU, AZ, AZ, BA, BG, BG, BR, BR, BR, BY, BY, BZ, BZ, CA, CA, CN, CN,
 CO, CO, CR, CR, CU, CU, CZ, CZ, CZ, DE, DE, DK, DK, DM, DM, EC, EC, EE, EE,
 EG, EG, ES, ES, FI, FI, GB, GB, GB, GB, GH, GH, GM, GM, HR, HR, HU, HU, ID,
 IL, IL, IN, IN, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, LC,
 LR, LR, LS, LS, LT, LT, LV, LV, MA, MD, MD, MG, MG, MW, MW, MX, MX, NZ,
 (English). CODEN: PXXXX. APPLICATION: NO 2004-GB99 2004/0113. PRIORITY:
 SE 2003-105 2003/0116.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = (un)substituted aryl, heteroaryl; R2, R3, R4, R5 =
 H, alkyl, cycloalkyl] and their pharmaceutically acceptable salts were
 prepared. For example, acylation of aniline II [R6 = H], e.g., prepared from
 4-(bromomethyl)benzoic acid Me ester in 8-steps, with acetyl chloride
 afforded piperidine II [R6 = COMe] as the trifluoroacetic acid salt in 52%
 yield. In human δ -opioid receptor binding assays, 7-examples of
 compds. I exhibited IC50 values ranging from 0.19-1.49 nM. Compds. I are
 claimed useful in the management of pain.

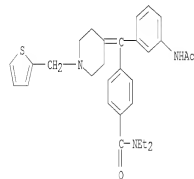
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 ylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide
 725242-57-9P, 4-[[3-(Acetylamino)phenyl][1-(2-
 furylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide
 725242-58-0P, 4-[[3-(Acetylamino)phenyl][1-(phenylmethyl)-4-
 piperidinyldene]methyl]-N,N-diethylbenzamide 725242-59-1P,
 4-[[3-(Acetylamino)phenyl][1-(3-thienylmethyl)-4-piperidinyldene]methyl]-
 N,N-diethylbenzamide 725242-60-4P, 4-[[3-(Acetylamino)phenyl][1-
 (5-pyridinylmethyl)-4-piperidinyldene]methyl]-N,N-diethylbenzamide
 725242-61-5P, 4-[[3-(Acetylamino)phenyl][1-(4-pyridinylmethyl)-4-
 piperidinyldene]methyl]-N,N-diethylbenzamide 725242-62-6P,
 4-[[3-(Acetylamino)phenyl][1-(pyridin-2-ylmethyl)piperidin-4-
 ylidene]methyl]-N,N-diethylbenzamide 725242-63-7P,

4-[[3-(Acetylamino)phenyl][1-(1,3-thiazol-4-ylmethyl)piperidin-4-
 ylidene]methyl]-N,N-diethylbenzamide 725242-64-8P,
 4-[[3-(Acetylamino)phenyl][1-(1,3-thiazol-5-ylmethyl)piperidin-4-
 ylidene]methyl]-N,N-diethylbenzamide 725242-67-1P
 725242-70-6P 725242-71-7P 725242-75-1P
 725242-80-8P 725242-83-1P 725242-87-5P
 725242-88-6P 725242-90-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THW
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (preparation of diarylmethylidene piperidines as δ -opioid receptor
 ligands for the treatment of pain.)

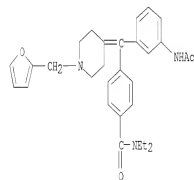
RN 725242-56-8 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(2-thienylmethyl)-4-
 piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 725242-57-9 CAPLUS

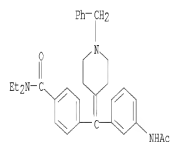
CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(2-furylmethyl)-4-
 piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)



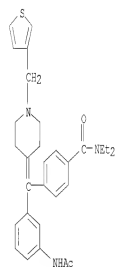
RN 725242-58-0 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(phenylmethyl)-4-
 piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)

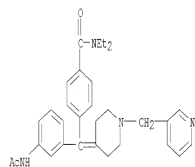
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RN 725242-59-1 CAPLUS
CN Benzamide, 4-[[3-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



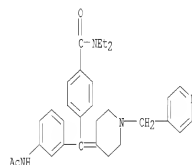
RN 725242-60-4 CAPLUS
CN Benzamide, 4-[[3-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



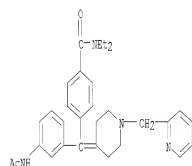
Page 293

Print selected from 10541656.trn

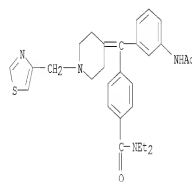
RN 725242-61-5 CAPLUS
CN Benzamide, 4-[[3-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 725242-62-6 CAPLUS
CN Benzamide, 4-[[3-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 725242-63-7 CAPLUS
CN Benzamide, 4-[[3-(3-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

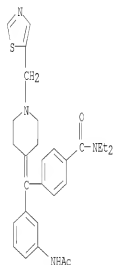


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Print selected from 10541656.trn

RN 725242-64-8 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



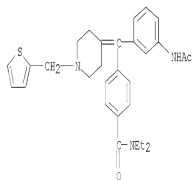
RN 725242-67-1 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-56-8

CMF C30 H35 N3 O2 S



CM 2

CRN 76-05-1

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Print selected from 10541656.trn

CMF C2 H F3 O2



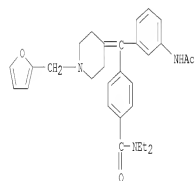
RN 725242-70-6 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(2-furanyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-57-9

CMF C30 H35 N3 O3



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 725242-71-7 CAPLUS

CN Benzamide, 4-[[3-(acetylamino)phenyl][1-(phenyl)methyl]-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

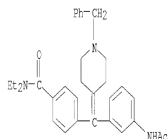
Page 296

Print selected from 10541656.trn

CM 1

CRN 725242-58-0

CMF C52 H57 N3 O2



CM 2

CRN 76-05-1

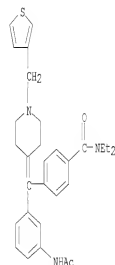
CMF C2 H F3 O2



RN 725242-75-1 CAPLUS

CM Benzamide, 4-[[3-(acetylamino)phenyl][1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

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● EC1

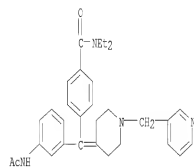
RN 725242-80-8 CAPLUS

CM Benzamide, 4-[[3-(acetylamino)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-60-4

CMF C31 H36 N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2

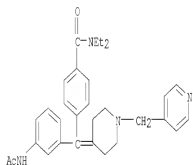
Print selected from 10541656.trn



RN 725242-83-1 CAPLUS
CN Benzamide, 4-[[[3-(acetylamino)phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-61-5
CMF C31 H36 N4 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 725242-97-5 CAPLUS
CN Benzamide, 4-[[[3-(acetylamino)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

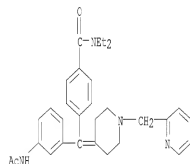
CM 1

CRN 725242-62-6

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Print selected from 10541656.trn

CMF C31 H36 N4 O2



CM 2

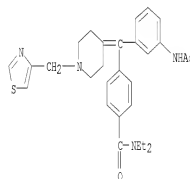
CRN 76-05-1
CMF C2 H F3 O2



RN 725242-88-6 CAPLUS
CN Benzamide, 4-[[[3-(acetylamino)phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-63-7
CMF C29 H34 N4 O2 S



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CM 2

CRN 76-05-1
CMP C2 H F3 O2

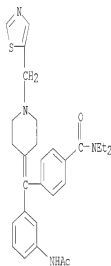


RN 725242-90-0 CAPLUS

CM Benzamide, 4-[(3-(acetylamino)phenyl)[1-(5-thiazolylmethyl)-4-piperidinyldene]methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725242-64-8
CMP C29 H34 N4 O2 S



CM 2

CRN 76-05-1
CMP C2 H F3 O2

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Print selected from 10541656.trn

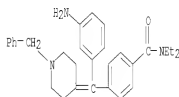


IT 477185-74-3P, 4-[1-(3-Aminophenyl)[1-(phenylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide 477185-77-6P, 4-[1-(3-Aminophenyl)[1-(2-furylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide 477185-79-9P 477185-80-1P 725242-78-4P, 4-[1-(3-Aminophenyl)[1-(3-pyridinylmethyl)-4-piperidinyldene]methyl]-N,N-diethylbenzamide 725242-85-3P, 4-[1-(3-(Acetylamino)phenyl)[piperidin-4-ylidene]methyl]-N,N-diethylbenzamide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of diarylmethylidene piperidines as 5-opioid receptor ligands for the treatment of pain.)

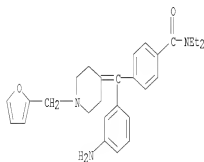
RN 477185-74-3 CAPLUS

CM Benzamide, 4-[(3-aminophenyl)[1-(phenylmethyl)-4-piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 477185-77-6 CAPLUS

CM Benzamide, 4-[(3-aminophenyl)[1-(2-furanylmethyl)-4-piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)

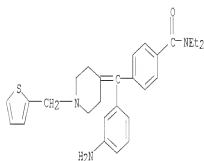


RN 477185-79-9 CAPLUS

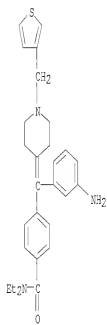
CM Benzamide, 4-[(3-aminophenyl)[1-(2-thienylmethyl)-4-piperidinyldene]methyl]-N,N-diethyl- (CA INDEX NAME)

Page 302

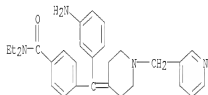
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RN 477195-90-1 CAPLUS
CN Benzanide, 4-[(3-aminophenyl)[1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



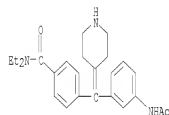
RN 725242-78-4 CAPLUS
CN Benzanide, 4-[(3-amino-phenyl)[1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



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Print selected from 10541656.trn

RN 725242-85-3 CAPLUS
CN Benzanide, 4-[(3-(acetylaminophenyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



L11 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
2004:606467 Document No. 141:157038 Preparation of 4-[(3-(sulfonylamino)phenyl)-1-(cyclohexyl)piperidin-4-ylidene]methyl]benzanide derivatives as delta opioid receptor ligands. Brown, William Griffin, Andrew; Walpole, Christopher (Astrazancea AB, Swed.; Astrazancea UK Limited). PCT Int. Appl. WO 2004063193 A1 20040729, 54 pp. DESIGNATED STATES: W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BG, BG, BS, BS, BW, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DM, DZ, EC, EC, EE, EE, EG, EG, ES, ES, FI, FI, GB, GB, GE, GE, GE, GE, GE, GE, GM, GM, HR, HR, HU, HU, ID, ID, IL, IL, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, LC, LC, LR, LR, LS, LS, LT, LT, LV, LV, MA, MA, MD, MD, MG, MG, MN, MN, MW, MW, MX, MX, MZ. (English). CODEN: FIKXDD. APPLICATION: WO 2004-GB61 20040113. PRIORITY: SE 2003-104 20030116.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = aryl, heteroaryl, etc.; R2-5 = H, alkyl, cycloalkyl, etc.] are prepared. For instance, 4-[bromo(4-carboxyphenyl)methyl]piperidin-1-carboxylic acid tert-Bu ester (preparation given) is converted to the diethylamide (CH2CL2, i-BuO2CCL, HNEt2), deprotected (CH2CL2, TFA), alkylated with thiophene-2-carboxaldehyde (1,2-dichloroethane, NaH/PhH/3), coupled to m-aminobenzoic acid (FMs/EtOH/EtO, Pd(PPh3)4, Na2CO3) and finally treated with methanesulfonic anhydride to give II. Compds. of the invention have IC50 in the range of 0.18 - 0.56 nM for the δ -opioid receptor. I are useful in the management of pain.

IT 728917-19-9P, N,N-Diethyl-4-[(3-[(methylsulfonyl)amino]phenyl)[1-(thien-2-ylmethyl)piperidin-4-ylidene]methyl]benzanide 728917-20-2P 728917-21-3P 728917-22-4P, N,N-Diethyl-4-[(1-(2-furanylmethyl)-4-piperidinylidene)[3-(methylsulfonyl)amino]phenylmethyl]benzanide 728917-23-5P, N,N-Diethyl-4-[(1-(phenylmethyl)-4-piperidinylidene)[3-(methylsulfonyl)amino]phenylmethyl]benzanide 728917-24-6P 728917-25-7P, N,N-Diethyl-4-[(3-[(methylsulfonyl)amino]phenyl)[1-

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(3-pyridinylmethyl)-4-piperidinylidene]methyl]benzamide

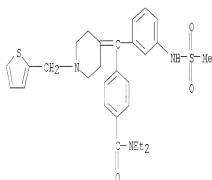
728917-26-8P 728917-30-4P 728917-31-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

[preparation of 4-[3-(sulfonylamino)phenyl-1-(cyclohexyl)piperidin-4-ylidene]methyl]benzamide derivs. as delta opioid receptor ligands]

RN 728917-19-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



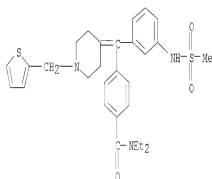
RN 728917-20-2 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 728917-19-9

CMF C29 H35 N3 O3 S2



CM 2

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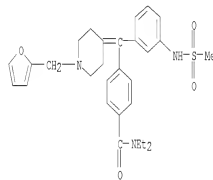
CRN 76-05-1

CMF C2 H F3 O2



RN 728917-21-3 CAPLUS

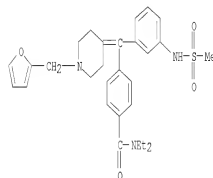
CN Benzamide, N,N-diethyl-4-[[1-(2-furanyl)ethyl]-4-piperidinylidene][3-[(methylsulfonyl)amino]phenyl]methyl]-, hydrochloride (5:6) (CA INDEX NAME)



● 5/5 HCl

RN 728917-22-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[1-(2-furanyl)ethyl]-4-piperidinylidene][3-[(methylsulfonyl)amino]phenyl]methyl]- (CA INDEX NAME)

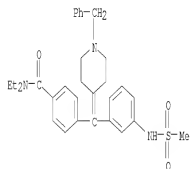


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RN 728917-23-5 CAPLUS

CM Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



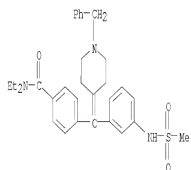
RN 728917-24-6 CAPLUS

CM Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-, trifluoroacetate (10:13) (9CI)
(CA INDEX NAME)

CM 1

CRN 728917-23-5

CMF C31 H37 N3 O3 S



CM 2

CRN 76-05-1

CMF C2 H F3 O2

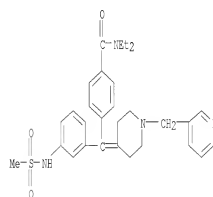
Page 307

Print selected from 10541656.trn



RN 728917-25-7 CAPLUS

CM Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



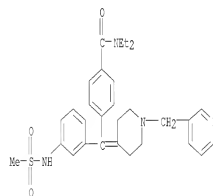
RN 728917-26-8 CAPLUS

CM Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-, trifluoroacetate (2:5) (9CI)
(CA INDEX NAME)

CM 1

CRN 728917-25-7

CMF C30 H36 N4 O3 S



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Print selected from 10541656.trn

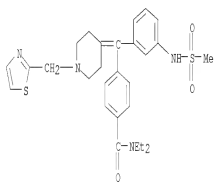
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 728917-30-4 CAPLUS

CM Benzamide, N,N-diethyl-4-[(3-[(methylsulfonyl)amino]phenyl)[1-(2-thiazolyl)methyl]-4-piperidinylidene)methyl]- (CA INDEX NAME)



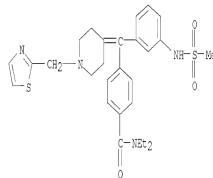
RN 728917-31-5 CAPLUS

CM Benzamide, N,N-diethyl-4-[(3-[(methylsulfonyl)amino]phenyl)[1-(2-thiazolyl)methyl]-4-piperidinylidene)methyl]-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 728917-30-4
CMF C29 H34 N4 O3 S2

Print selected from 10541656.trn



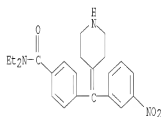
CM 2

CRN 76-05-1
CMF C2 H F3 O2

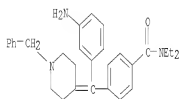


II 209807-56-7P, N,N-Diethyl-4-[(3-nitrophenyl)-4-piperidinylidene)methyl]benzamide 477185-74-3P, 4-[(3-Aminophenyl)[1-(phenylmethyl)piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 477185-77-6P, 4-[(3-Aminophenyl)[1-(2-furylmethyl)piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 477185-79-8P 725242-78-0P, 4-[(3-Aminophenyl)[1-(3-pyridinylmethyl)-4-piperidinylidene)methyl]-N,N-diethylbenzamide 728917-27-9P, 4-[[4-[(Diethylamino)carbonyl]phenyl](3-nitrophenyl)methylene]-1-piperidinecarboxylic acid 1,1-dimethylethyl ester 728917-28-0P 728917-29-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 4-[3-(sulfonylamino)phenyl-1-(cyclohexyl)piperidin-4-ylidene)methyl]benzamide derivs. as delta opioid receptor ligands)
RN 209807-56-7 CAPLUS
CM Benzamide, N,N-diethyl-4-[(3-nitrophenyl)-4-piperidinylidene)methyl]- (CA INDEX NAME)

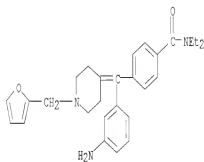
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RN 477185-74-3 CASUS
CN Benzanide, 4-[(3-aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

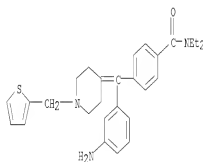


RN 477185-77-6 CASUS
CN Benzanide, 4-[(3-aminophenyl)[1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

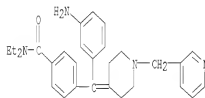


RN 477185-79-8 CASUS
CN Benzanide, 4-[(3-aminophenyl)[1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

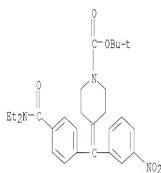
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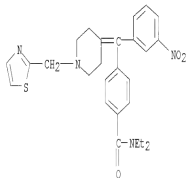
RN 725242-78-4 CASUS
CN Benzanide, 4-[(3-aminophenyl)[1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



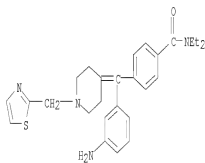
RN 728917-27-9 CASUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](3-nitrophenyl)methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 728917-28-0 CASUS
CN Benzanide, N,N-diethyl-4-[(3-nitrophenyl)[1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)

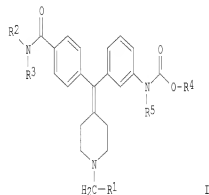


RN 728917-29-1 CAPLUS
CN Benzanide, 4-[(3-aminophenyl)[1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

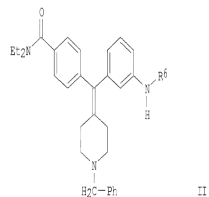


111 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2008 ACS ON STN
2004A606441 Document No. 141:140324 Preparation of diarylmethylphosphine
piperidines as o-phenyl receptor ligands for the treatment of pain.
Brom, William; Griffin, Andrew Walpole, Christopher (AstraceneA Ab,
Sveed.; Astracene UK Limited). PCT Int. Appl. NO 2004/036157 AL 20040723,
56 pp. DESIGNATED STATES: US, AU, AE, AG, AL, AM, AN, AR, AT, AU, AZ, BA,
BB, BG, BR, CA, CC, CG, CH, CN, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, FR, GB, GR, GU, HK, HU, IL, IN, JP, KE, KG, KH, KR, KZ, LA, LB, LG, LI, LU,
LV, LY, MA, MD, ME, MG, MK, MN, MU, MW, MY, NZ, OM, PA, PE, PG, PH, PK, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, SR, SS, SV, SY, TD, TH, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UY, UZ, VC, VE, VN, YU, ZA, ZM, ZW. (English). COORDINATE:
PINDEX APPLICATION NO 2004-GS16 20040113.
PRIORITY: SE 2003:105 20030116.

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II

AS Title compds. I [R1 = (un)substituted aryl, heteroaryl; R2, R3, R4, R5 = H, alkyl, cycloalkyl] and their pharmaceutically acceptable salts were prepared. For example, acylation of aniline II [R6 = H], e.g., prepared from 4-(bromomethyl)benzoic acid Me ester in 8-steps, with Me chloroformate, afforded piperidine II [R6 = COOMe] as the trifluoroacetic acid salt in 38% yield. In human 6- α -opioid receptor binding assays, 4-examples of compds. I exhibited IC50 values ranging from 0.30-0.48 nM, e.g., the IC50 value of piperidine II [R6 = COOMe] was 0.48 nM. Compds. I are claimed useful in the management of pain.

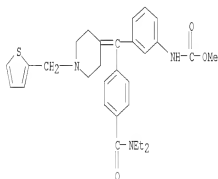
IT 725229-70-9P 725229-71-0P 725229-72-1P
725229-73-2P 725229-74-3P 725229-75-4P
725229-76-5P 725229-78-7P 725229-79-8P
725229-80-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidines as δ -opioid receptor ligands for the treatment of pain.)

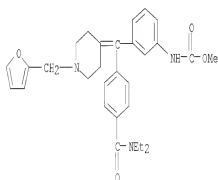
RN 725229-70-9 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-thienylmethyl)-4-piperidinyldene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

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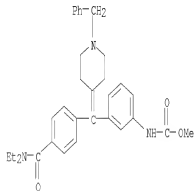
RN 725229-71-0 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-furylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 725229-72-1 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

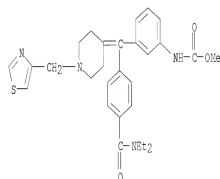


RN 725229-73-2 CAPLUS

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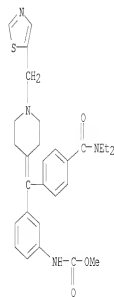
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CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 725229-74-3 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 725229-75-4 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

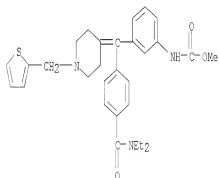
CH 1

CRM 725229-70-9

Page 316

Print selected from 10541656.trn

CMF C30 H35 N3 O3 S



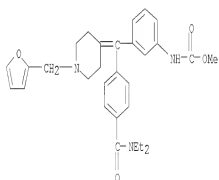
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 725229-76-5 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-furanylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● 9CI

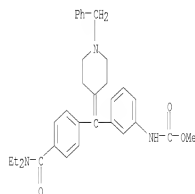
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RN 725229-78-7 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725229-72-1
CMF C32 H37 N3 O3



CM 2

CRN 76-05-1
CMF C2 H F3 O2



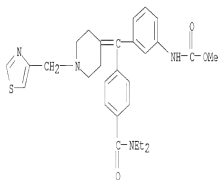
RN 725229-79-8 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazoilylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725229-73-2
CMF C29 H34 N4 O3 S

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 725229-80-1 CAPLUS

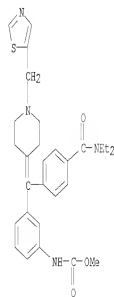
CM Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725229-74-3

CMF C29 H34 N4 O3 S

Print selected from 10541656.trn



CM 2

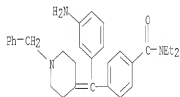
CRN 76-05-1

CMF C2 H F3 O2

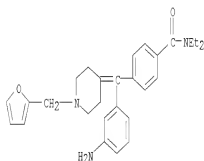


IT 477185-74-3P 477185-77-6P, 4-[(3-Aminophenyl)[1-(2-furylmethyl)piperidin-4-ylidene]methyl]-N,N-diethylbenzamide
477185-79-8P 725229-84-5P, 4-[(3-Aminophenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-1-piperidinecarboxylic acid 1,1-dimethylethyl ester 725229-85-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylene piperidines as δ -opioid receptor ligands for the treatment of pain.)
RN 477185-74-3 CAPLUS
CM Benzamide, 4-[(3-aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

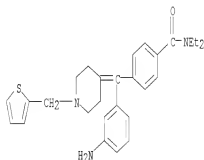
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RN 477185-77-6 CAPLUS
CN Benzanide, 4-[(3-aminophenyl)[1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



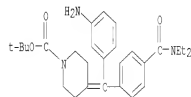
RN 477185-79-8 CAPLUS
CN Benzanide, 4-[(3-aminophenyl)[1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



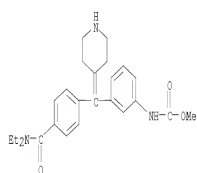
RN 725229-84-5 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[(3-aminophenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

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Print selected from 10541656.trn



RN 725229-85-6 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2008 ACS on STW
2004:412920 Document No. 140:423590 Preparation of 4-(phenylpiperidin-4-ylidene)methylbenzanides for treatment of pain, anxiety, or gastrointestinal disorders. Brown, William; Griffin, Andrew (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2004/041784 A1 20040521, 96 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CP, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GR, GU, HK, HU, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RN: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXX02. APPLICATION: WO 2003-S21705 20031105. PRIORITY: SE 2002-3301 20021107.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title Comps. I [wherein R1 = (un)substituted alkyl, cycloalkyl(alkyl), (hetero)aryl, R8O, R8SO2, R8SO, R8NHCO, R8NC, or R8NHCS; R2 = H or (un)substituted alkyl; R3 = H or (un)substituted alkoxy(carbonyl, alkyl, or cycloalkyl(alkyl)); R8 = (un)substituted alkyl, (hetero)aryl(alkyl), or cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were prepared as opicoid & receptor ligands. For example, reaction of

Page 322

4-[(trcmethyl)benzoic acid Me ester with P(OMe)₃, followed by addition of 1-(tert-butoxycarbonyl)-4-piperidine in the presence of LDA in THF, gave 4-[(4-methoxycarbonylbenzylidene)piperidine-1-carboxylic acid tert-Bu ester (55%). Addition of Br₂ (78%) and reaction with NaOH in MeOH provided 4-[(trcm(4-carboxyphenyl)methyl)enyl]piperidine-1-carboxylic acid tert-Bu ester (87%). Conversion to the benzoyl chloride with iso-Bu chloroformate and amidation (73%) with Et₃NH in the presence of TEA in CH₂Cl₂, followed by coupling with 3-aminophenylboronic acid using Pd(PPh₃)₄ and Na₂CO₃ in toluene/EtOH/H₂O afforded N,N-diethyl-4-[(3-aminophenyl)(piperidin-4-ylidene)methyl]benzamide (97%). Alkylation of the amine with benzaldehyde and NaBH(OAc)₃ in 1,2-dichloroethane gave II. In binding assays using human 293S cells expressing cloned human opioid receptors and neomycin resistance, most compds. of the invention exhibited activity toward the δ receptor with IC₅₀ values in the range of 0.14 nM - 31.2 nM.

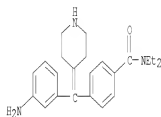
Simplified compds. also showed some activity toward the κ and μ receptors with IC₅₀ values in the ranges of 36 nM - 9690 nM and 3 nM - 5975 nM, resp. Thus, I and their pharmaceutical compds. are useful in therapy, in particular for the treatment of gastrointestinal disorders, anxiety, or pain (no data).

- II 209807-93-26, N,N-Diethyl-4-[(3-aminophenyl)(piperidin-4-ylidene)methyl]benzamide 692246-40-56, tert-Butyl 4-[[4-[(diethylamino)carbonyl]phenyl](3-hydroxyphenyl)methyl]piperidine-1-carboxylate 692246-42-76, tert-Butyl 4-[[4-[(diethylamino)carbonyl]phenyl][3-[[[(trifluoromethyl)sulfonyl]oxy]phenyl]methyl]piperidine-1-carboxylate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of (phenyl)piperidinylidenemethyl]benzamides as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

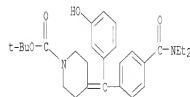
RN 209807-93-2 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



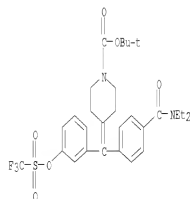
RN 692246-40-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](3-hydroxyphenyl)methyl]enyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 692246-42-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](3-[[[(trifluoromethyl)sulfonyl]oxy]phenyl]methyl]enyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



II 692245-00-46 692245-02-66 692245-04-86

692245-06-06 692245-09-36 692245-13-96

692245-17-36 692245-21-96 692245-25-36

692245-29-76 692245-33-36 692245-37-76

692245-41-36 692245-45-76 692245-49-16

692245-53-76 692245-57-16 692245-61-76

692245-65-16 692245-69-56 692245-73-16

692245-77-56 692245-81-16 692245-86-66

692245-90-26 692245-94-66 692245-98-06

692246-02-92 692246-04-36 692246-10-36

692246-14-36 692246-18-76 692246-22-36

692246-26-76 692246-30-36 692246-34-76

692246-38-16 692246-44-16 692246-50-76

692246-54-16 692246-58-56 692246-62-16

692246-66-56 692246-70-16 692246-74-56

692246-78-96 692246-82-56 692246-87-06

692246-91-66 692246-95-06 692246-99-46

692247-03-36 692247-07-76 692247-11-36

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); TH (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USDS (Uses)
(δ receptor agonist; preparation of (phenyl)piperidinylidenemethyl]benzamides as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

RN 692245-00-4 CAPLUS

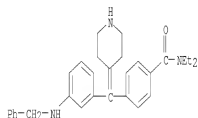
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CN Benzanide, N,N-diethyl-4-[(3-[(phenylmethyl)amino]phenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (10:27) (9CI) (CA INDEX NAME)

CM 1

CRN 692244-99-8

CMF C30 H35 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 692245-02-6 CAPLUS

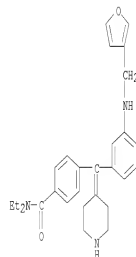
CN Benzanide, N,N-diethyl-4-[(3-[(3-furanylmethyl)amino]phenyl)-4-piperidinylidenemethyl]-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-01-5

CMF C28 H33 N3 O2

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



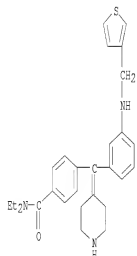
RN 692245-04-8 CAPLUS

CN Benzanide, N,N-diethyl-4-[(4-piperidinylidene-3-[(3-thienylmethyl)amino]phenyl)methyl]-, trifluoroacetate (5:12) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-03-7

CMF C28 H33 N3 O 5



CM 2

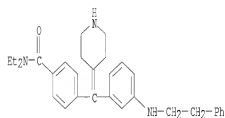
CRN 76-05-1
CMF C2 H F3 O2



RN 692245-04-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(2-phenylethyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-05-9
CMF C31 H37 N3 O



CM 2

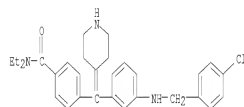
CRN 76-05-1
CMF C2 H F3 O2



RN 692245-09-3 CAPLUS
CN Benzamide, 4-[[3-[[[4-(4-chlorophenyl)methyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-07-1
CMF C30 H34 Cl N3 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2



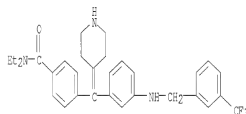
RN 692245-13-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[4-(trifluoromethyl)phenyl]methyl]amino]phenyl]methyl]-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

Print selected from 10541656.trn

CM 1

CRN 692245-11-7

CMF C31 H34 F3 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2



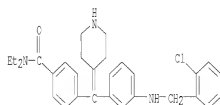
RN 692245-17-3 CAPLUS

CM Benzamide, 4-[[3-[[[2-(chlorophenyl)methyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-15-1

CMF C30 H34 Cl N3 O



CM 2

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Print selected from 10541656.trn

CRN 76-05-1

CMF C2 H F3 O2



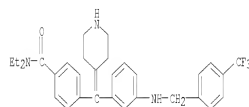
RN 692245-21-9 CAPLUS

CM Benzamide, N,N-diethyl-4-[[4-(piperidinylidene-3-[[[4-(trifluoromethyl)phenyl]methyl]amino]phenyl)methyl]-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-19-5

CMF C31 H34 F3 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 692245-25-3 CAPLUS

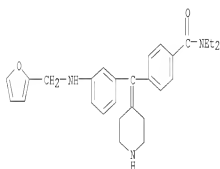
CM Benzamide, N,N-diethyl-4-[[3-[[[2-(furanylmethyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-23-1

CMF C28 H33 N3 O2

Page 330



CM 2

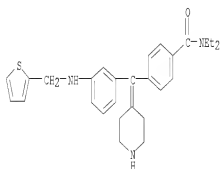
CRN 76-05-1
CME C2 H F3 O2



RN 692245-23-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-[(4-piperidinylidene)-3-[(2-thienyl)methyl]amino]phenyl)methyl]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-27-5
CME C28 H33 N3 O 5



CM 2

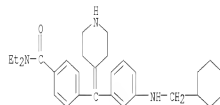
CRN 76-05-1
CME C2 H F3 O2



RN 692245-33-3 CAPLUS
CN Benzamide, 4-[(3-[(cyclohexylmethyl)amino]phenyl)-4-piperidinylidene)methyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-31-1
CME C30 H41 N3 O



CM 2

CRN 76-05-1
CME C2 H F3 O2

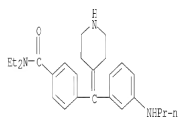


RN 692245-37-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-piperidinylidene)-3-[(propylamino)phenyl)methyl]-, trifluoroacetate (10:29) (9CI) (CA INDEX NAME)

CM 1

Print selected from 10541656.trn

CRN 692245-35-5
CMF C26 H35 N3 O



CM 2

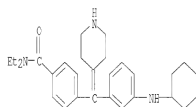
CRN 76-05-1
CMF C2 H F3 O2



RN 692245-41-3 CAPLUS
CN Benzamide, 4-[[3-(cyclohexylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-39-9
CMF C29 H39 N3 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

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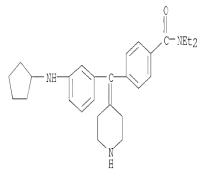
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RN 692245-45-7 CAPLUS
CN Benzamide, 4-[[3-(cyclopentylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-43-5
CMF C28 H37 N3 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2



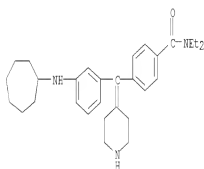
RN 692245-49-1 CAPLUS
CN Benzamide, 4-[[3-(cycloheptylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-47-9
CMF C30 H41 N3 O

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Print selected from 10541656.trn



CM 2

CRN 76-05-1
CMF C2 H F3 O2

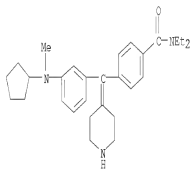


RN 692245-53-7 CAPLUS

CM Benzamide, 4-[[3-(cyclopentylmethylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:14) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-51-5
CMF C29 H39 N3 O



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Print selected from 10541656.trn

CM 2

CRN 76-05-1
CMF C2 H F3 O2

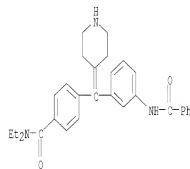


RN 692245-57-1 CAPLUS

CM Benzamide, 4-[[3-(benzoylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-55-9
CMF C30 H33 N3 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 692245-61-7 CAPLUS

CM Benzeneacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

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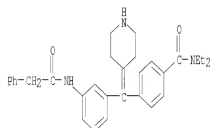
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NAME)

CM 1

CRN 692245-59-3

CMP C31 H35 N3 O2



CM 2

CRN 76-05-1

CMP C2 H F3 O2



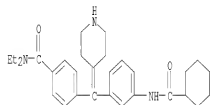
RN 692245-65-1 CAPLUS

CN Benzamide, 4-[[3-[(cyclohexylcarbonyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-61-9

CMP C30 H39 N3 O2



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Print selected from 10541656.trn

CM 2

CRN 76-05-1

CMP C2 H F3 O2



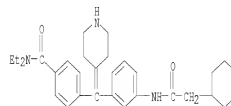
RN 692245-69-5 CAPLUS

CN Benzamide, 4-[[3-[(cyclohexylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 692245-67-3

CMP C31 H41 N3 O2



CM 2

CRN 76-05-1

CMP C2 H F3 O2



RN 692245-73-1 CAPLUS

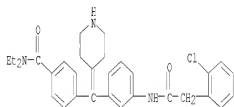
CN Benzamide, 2-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

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Print selected from 10541656.trn

CRN 692245-71-9
CMF C31 H34 C1 N3 02

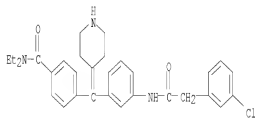


CM 2
CRN 76-05-1
CMF C2 H F3 02



RN 692245-77-5 CAPLUS
CN Benzeneacetamide, 3-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1
CRN 692245-75-3
CMF C31 H34 C1 N3 O2



CM 2
CRN 76-05-1

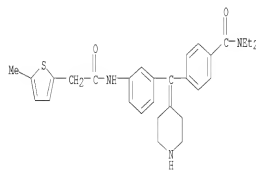
Print selected from 10541656.trn

CMF C2 H F3 O2



RN 692245-81-1 CAPLUS
CN 2-Thiopheneacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-5-methyl-, trifluoroacetate (5:6) (9CI)
(CA INDEX NAME)

CM 1
CRN 692245-79-7
CMF C30 H35 N3 O2 S



CM 2
CRN 76-05-1
CMF C2 H F3 02



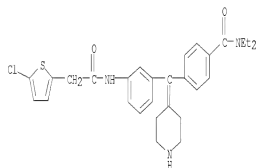
RN 692245-86-6 CAPLUS
CN 2-Thiopheneacetamide, 5-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

Print selected from 10541636.trn

CM 1

CRN 692245-84-4

CMF C29 H32 Cl N3 O2 S



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 692245-90-2 CAPLUS

CN Benzeneacetamide, N-[3-[[4-[(diethylamino)carbonylphenyl]-4-piperidinylidenemethyl]phenyl]- α -methyl-, (aS)-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

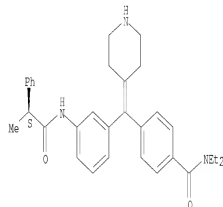
CM 1

CRN 692245-88-8

CMF C32 H37 N3 O2

Absolute stereochemistry.

Print selected from 10541636.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 692245-94-6 CAPLUS

CN Benzeneacetamide, N-[3-[[4-[(diethylamino)carbonylphenyl]-4-piperidinylidenemethyl]phenyl]- α -methyl-, (aS)-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

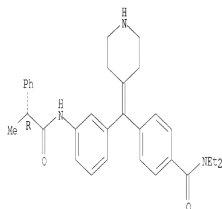
CM 1

CRN 692245-92-4

CMF C32 H37 N3 O2

Absolute stereochemistry.

Print selected from 10541656.trn



CM 2

CRW 76-05-1

CMF C2 H F3 O2



RN 692245-98-0 CAMELUS

CN Benzenesacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-α-ethyl-, (αS)-, trifluoroacetate (5:18) (9CI) (CA INDEX NAME)

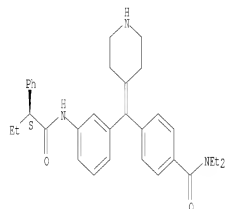
CM 1

CRW 692245-96-8

CMF C33 H39 N3 O2

Absolute stereochemistry.

Print selected from 10541656.trn



CM 2

CRW 76-05-1

CMF C2 H F3 O2



RN 692246-02-9 CAMELUS

CN Benzenesacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-α-ethyl-, (αR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

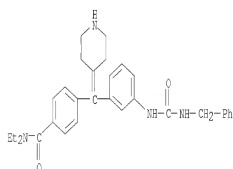
CRW 692246-00-7

CMF C33 H39 N3 O2

Absolute stereochemistry.

Print selected from 10541656.trn

CRN 692246-12-1
CMF C31 H36 N4 O2

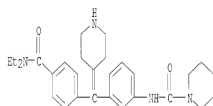


CM 2
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-18-7 CAPLUS
CN 1-Piperidinecarboxamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1
CRN 692246-16-5
CMF C29 H38 N4 O2



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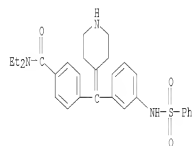
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CM 2
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-22-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(phenylsulfonyl)amino]phenyl]-4-piperidinylidenemethyl]-, tetrakis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1
CRN 692246-20-1
CMF C29 H33 N3 O3 S



CM 2
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-26-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(phenylmethyl)sulfonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:14) (9CI) (CA INDEX NAME)

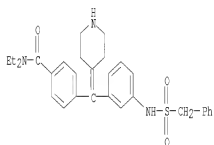
Page 348

Print selected from 10541686.trn

CM 1

CRN 692246-24-5

CMF C30 H35 N3 O3 S



CM 2

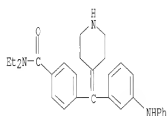
CRN 76-05-1

CMF C2 H F3 O2



RN 692246-30-3 CAPLUS

CM Benzanide, N,N-diethyl-4-[[3-(phenylamino)phenyl]-4-piperidinylidenemethyl]-, hydrochloride (5:6) (CA INDEX NAME)



● 6/5 HCL

RN 692246-34-7 CAPLUS

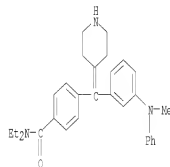
CM Benzanide, N,N-diethyl-4-[[3-(methylphenylamino)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:13) (9CI) (CA INDEX NAME)

Print selected from 10541686.trn

CM 1

CRN 692246-32-5

CMF C30 H35 N3 O



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 692246-38-1 CAPLUS

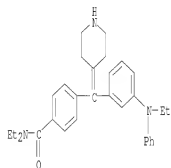
CM Benzanide, N,N-diethyl-4-[[3-(ethylphenylamino)phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-36-9

CMF C31 H37 N3 O

Print selected from 10541686.trn



CM 2

CRN 76-05-1
CMF C2 H F3 O2

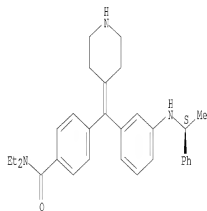


RN 692246-46-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(1S)-1-phenylethyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:1) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-44-9
CMF C31 H37 N3 O

Absolute stereochemistry.



Print selected from 10541686.trn

CM 2

CRN 76-05-1
CMF C2 H F3 O2

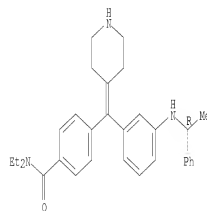


RN 692246-50-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(1R)-1-phenylethyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:37) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-48-3
CMF C31 H37 N3 O

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



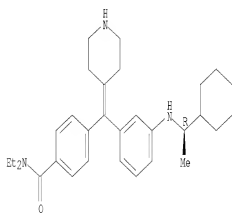
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RN 692246-54-1 CAPLUS
CN Benzamide, 4-[[3-[[[(1R)-1-cyclohexylethyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-52-9
CMF C31 H43 N3 O

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 692246-58-5 CAPLUS
CN Benzamide, 4-[[3-[[[(1S)-1-cyclohexylethyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

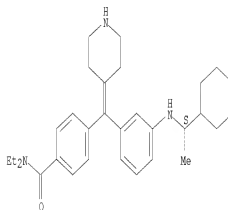
CM 1

CRN 692246-56-3
CMF C31 H43 N3 O

Absolute stereochemistry.

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CM 2

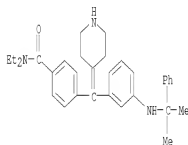
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-62-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(1-methyl-1-phenylethyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:29) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-60-9
CMF C32 H39 N3 O



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CM 2

CRN 76-05-1

CHF C2 H F3 O2



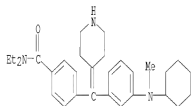
RN 692246-66-5 CAPLUS

CN Benzamide, 4-[[3-(cyclohexylmethylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, trifluoroacetate (5:18) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-64-3

CHF C30 H41 N3 O



CM 2

CRN 76-05-1

CHF C2 H F3 O2



RN 692246-70-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-piperidinylidene[3-(1-piperidinyl)phenyl]methyl]-, trifluoroacetate (10:29) (9CI) (CA INDEX NAME)

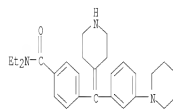
CM 1

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CRN 692246-68-7

CHF C28 H37 N3 O



CM 2

CRN 76-05-1

CHF C2 H F3 O2



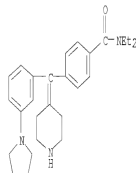
RN 692246-74-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-piperidinylidene[3-(1-pyrrolidinyl)phenyl]methyl]-, trifluoroacetate (5:13) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-72-3

CHF C27 H35 N3 O



CM 2

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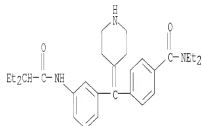
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-78-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(2-ethyl-1-oxobutyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-76-7
CMF C29 E39 N3 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2



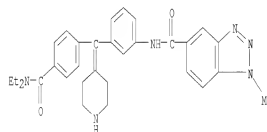
RN 692246-82-5 CAPLUS
CN 1H-Benzotriazole-5-carboxamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-4-methyl-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

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Print selected from 10541656.trn

CRN 692246-80-3
CMF C31 H34 N6 O2



CM 2

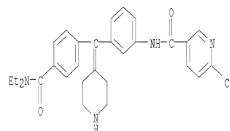
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-87-0 CAPLUS
CN 3-Pyridinecarboxamide, 6-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-85-8
CMF C29 H31 Cl N4 O2



CM 2

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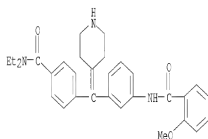
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CMF C2 H F3 O2



RN 692246-91-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[[1-[(2-methoxybenzoyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-89-2
CMF C31 H35 N3 O3



CM 2

CRN 76-05-1
CMF C2 H F3 O2



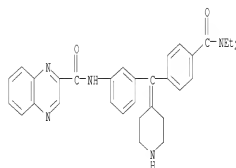
RN 692246-95-0 CAPLUS
CN 2-Quinoxalinecarboxamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

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CRN 692246-93-8
CMF C32 H33 N5 O2



CM 2

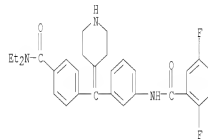
CRN 76-05-1
CMF C2 H F3 O2



RN 692246-99-4 CAPLUS
CN Benzamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-2,5-difluoro-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-97-2
CMF C30 H31 F2 N3 O2



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CM 2

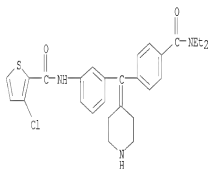
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CMF C2 H F3 O2



RN 692247-03-3 CAPLUS
CN 2-Thiophenecarboxamide, 3-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692247-01-1
CMF C28 H30 Cl N3 O2 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2



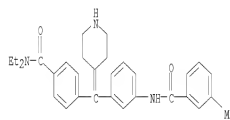
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Print selected from 10541656.trn

RN 692247-07-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(3-methylbenzoyl)amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 692247-05-5
CMF C31 H35 N3 O2



CM 2

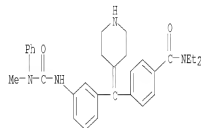
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RN 692247-11-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[methylphenylamino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 692247-09-9
CMF C31 H36 N4 O2



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CM 2

CRM 76-05-1
CMP C2 H F3 O2

II 692244-99-82, 4-[[3-(Benzylamino)phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 692245-01-32,
N,N-Diethyl-4-[[3-[(3-furylmethyl)amino]phenyl](piperidin-4-ylidene)methyl]benzamide 692245-03-72, N,N-Diethyl-4-[[piperidin-4-ylidene][3-[[thien-3-yl)methyl]amino]phenyl]methyl]benzamide 692245-05-92, N,N-Diethyl-4-[[3-[(2-phenylethyl)amino]phenyl](piperidin-4-ylidene)methyl]benzamide 692245-07-12,
4-[[3-[(4-Chlorobenzyl)amino]phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 692245-11-72, N,N-Diethyl-4-[[piperidin-4-ylidene][3-[(3-trifluoromethyl)benzyl]amino]phenyl]methyl]benzamide 692245-15-12, 4-[[3-[(2-Chlorobenzyl)amino]phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 692245-19-32,
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4-[[3-[(Cyclohexylmethyl)amino]phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide 692245-35-52, N,N-Diethyl-4-[[piperidin-4-ylidene][3-[(propylamino)phenyl]methyl]benzamide 692245-39-92,
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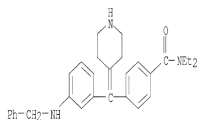
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RL: PNC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (δ receptor agonist; preparation of (phenylpiperidinylidenemethyl)benz
 amides as δ receptor agonists for treatment of pain, anxiety, or
 gastrointestinal disorders)

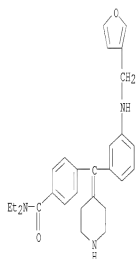
RN 692244-99-8 CAPLUS

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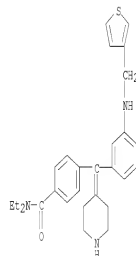
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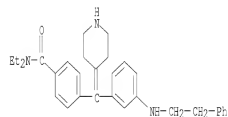
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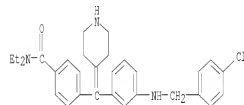
RN 692245-05-9 CAPLUS

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RN 692245-07-1 CAPLUS

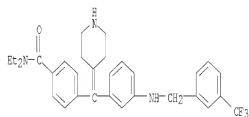
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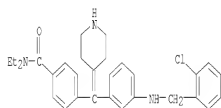
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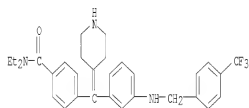
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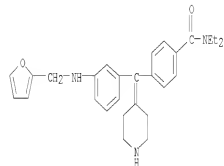


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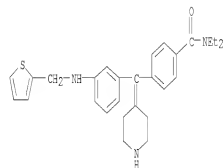


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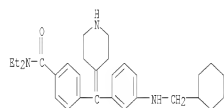
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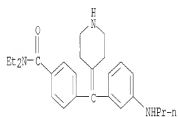


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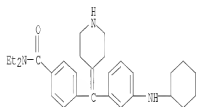


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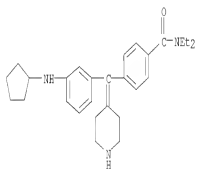
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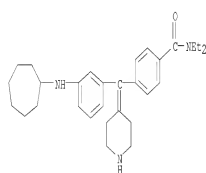


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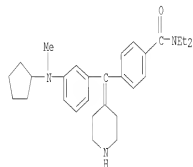


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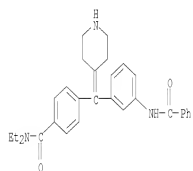
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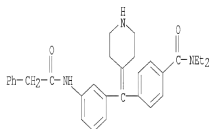


RN 692245-55-9 CAPLUS
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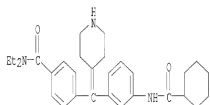


RN 692245-59-3 CAPLUS
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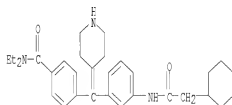
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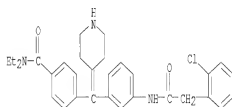
RN 692245-63-9 CAPLUS
CN Benzenesacetamide, 4-[[3-[(cyclohexylcarbonyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 692245-67-3 CAPLUS
CN Benzenesacetamide, 4-[[3-[(cyclohexylacetyl)amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)



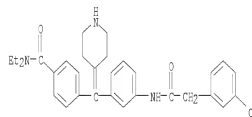
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CN Benzenesacetamide, 2-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



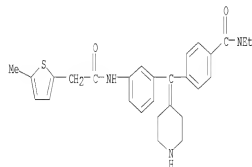
Page 371

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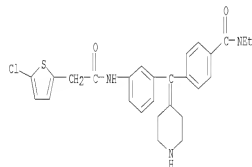
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CN Benzenesacetamide, 3-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



RN 692245-79-7 CAPLUS
CN 2-Thiopheneacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-5-methyl- (CA INDEX NAME)



RN 692245-84-4 CAPLUS
CN 2-Thiopheneacetamide, 5-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



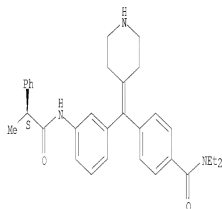
RN 692245-88-8 CAPLUS

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CN Benzeneacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- α -methyl-, (aS)- (CA INDEX NAME)

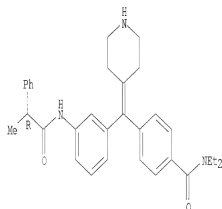
Absolute stereochemistry.



RN 692245-92-4 CAPLUS

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Absolute stereochemistry.

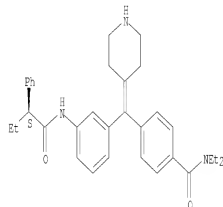


RN 692245-96-8 CAPLUS

CN Benzeneacetamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- α -ethyl-, (aS)- (CA INDEX NAME)

Absolute stereochemistry.

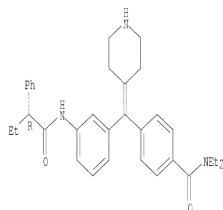
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RN 692246-00-7 CAPLUS

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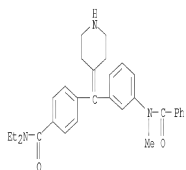
Absolute stereochemistry.



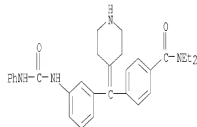
RN 692246-04-1 CAPLUS

CN Benzamide, 4-[[3-(benzoylmethylamino)phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

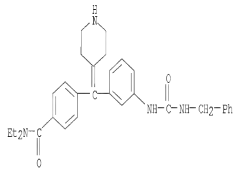
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RN 692246-09-5 CAFLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidene]methyl]- (CA INDEX NAME)

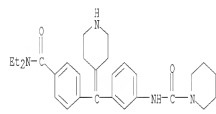


RN 692246-12-1 CAFLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidene]methyl]- (CA INDEX NAME)

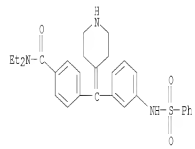


RN 692246-16-5 CAFLUS
CN 1-Piperidinecarboxamide, N-[3-[[4-[[[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl]- (CA INDEX NAME)

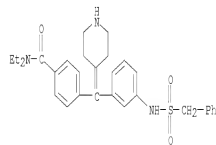
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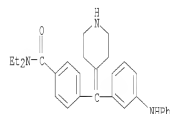
RN 692246-20-1 CAFLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylsulfonyl)amino]phenyl]-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 692246-24-5 CAFLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)sulfonyl]amino]phenyl]-4-piperidinylidene]methyl]- (CA INDEX NAME)



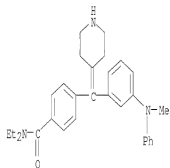
RN 692246-28-9 CAFLUS
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylamino)phenyl]-4-piperidinylidene]methyl]- (CA INDEX NAME)



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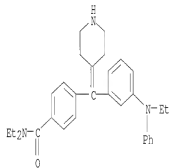
RN 692246-32-5 CAPLUS

CN Benzanide, N,N-diethyl-4-[[3-(methylphenylamino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 692246-36-9 CAPLUS

CN Benzanide, N,N-diethyl-4-[[3-(ethylphenylamino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

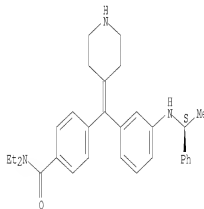


RN 692246-44-9 CAPLUS

CN Benzanide, N,N-diethyl-4-[[3-[[[(1S)-1-phenylethyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

Absolute stereochemistry.

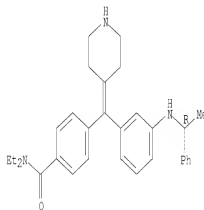
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RN 692246-48-3 CAPLUS

CN Benzanide, N,N-diethyl-4-[[3-[[[(1R)-1-phenylethyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

Absolute stereochemistry.

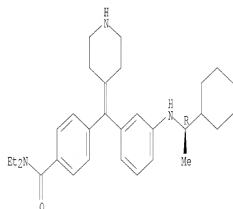


RN 692246-52-9 CAPLUS

CN Benzanide, 4-[[3-[[[(1R)-1-cyclohexylethyl]amino]phenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

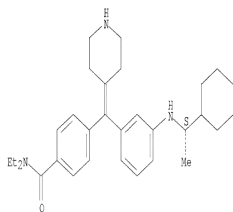
Absolute stereochemistry.

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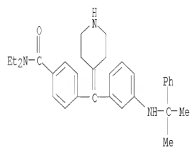


RN 692246-56-3 CAPLUS
CN Benzamide, 4-[(3-[(1S)-1-cyclohexylethyl]amino)phenyl]-4-piperidinylidenemethyl-, N,N-diethyl- (CA INDEX NAME)

Absolute stereochemistry.

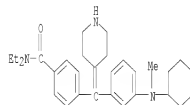


RN 692246-60-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-[(1-methyl-1-phenylethyl]amino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

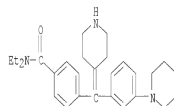


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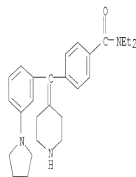
RN 692246-64-3 CAPLUS
CN Benzamide, 4-[(3-(cyclohexylmethylamino)phenyl]-4-piperidinylidenemethyl-, N,N-diethyl- (CA INDEX NAME)



RN 692246-68-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-(1-piperidinyl)phenyl)methyl]- (CA INDEX NAME)

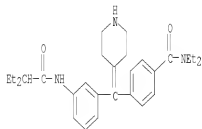


RN 692246-72-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-(1-piperidinyl)phenyl)methyl]- (CA INDEX NAME)

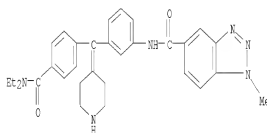


RN 692246-76-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-[(2-ethyl-1-oxobutyl]amino)phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

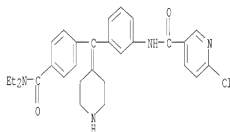
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RN 692246-80-3 CAPLUS
CN 1H-Benzotriazole-5-carboxamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-1-methyl- (CA INDEX NAME)

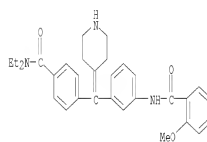


RN 692246-85-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)

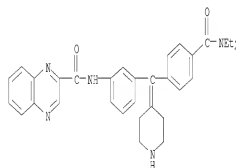


RN 692246-89-2 CAPLUS
CN Benzamide, N,N-diethyl-4-[[3-[(2-methoxybenzoyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)

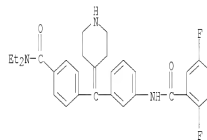
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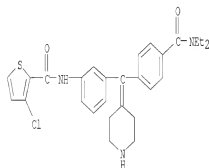
RN 692246-93-8 CAPLUS
CN 2-Quinoxalinecarboxamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



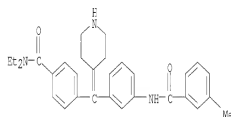
RN 692246-97-2 CAPLUS
CN Benzamide, N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]-2,5-difluoro- (CA INDEX NAME)



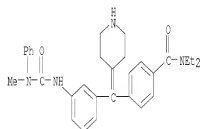
RN 692247-01-1 CAPLUS
CN 2-Thiophenecarboxamide, 3-chloro-N-[3-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidenemethyl]phenyl]- (CA INDEX NAME)



RN 692247-05-5 CASUS
CN Benzamide, N,N-diethyl-4-[[3-[(3-methylbenzoyl)amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



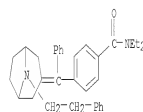
RN 692247-03-9 CASUS
CN Benzamide, N,N-diethyl-4-[[3-[(methylphenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (CA INDEX NAME)



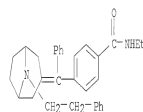
111 ANSWER 19 OF 39 CASUS COPYRIGHT 2008 ACS on SIN
2004:303272 Document No. 141:64578 N-alkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides, μ and δ opioid agonists: a review
address: Carson, John R.; Coats, Steven J.; Codd, Ellen E.; Dax, Scott L.; Lee, Tung; Hartline, Rebecca P.; McTown, Linda A.; Neilson, Lou Anne; Pitts, Philip M.; Wu, Wu-Meng; Zhang, Sui-Po (Drug Discovery, Johnson and Johnson Pharmaceutical Research and Development, LLC, Spring House, PA, 15477-0776, USA). Bioorganic & Medicinal Chemistry Letters, 14(9), 2113-2116 (English) 2004. CODEN: BWLEB8. ISSN: 0960-894X. Publisher:

Elsevier Science B.V..

AB The tertiary amide δ opioid agonist is a potent antinociceptive agent. The δ selective opioid agonist was metabolized in vitro and in vivo to secondary amide, a potent and selective μ opioid agonist. The structure-activity relationship of a series of N-alkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides was examined
IT 359862-85-4
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-activity relationship studies of substituted benzamides as μ and δ opioid receptor agonists)
RN 359862-85-4 CASUS
CN Benzamide, N,N-diethyl-4-[[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



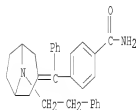
IT 359862-90-1 359862-91-2 359862-99-0
359863-00-6 359863-02-8 359863-03-9
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359863-29-9 710983-36-1 710983-47-4
710983-51-0 710983-71-4 710983-75-8
710983-79-2 710983-83-8 710983-87-2
710983-91-8 710983-94-1 710983-98-5
710984-04-6 710984-08-0 710984-11-5
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710984-24-0 710984-28-4 710984-32-0
710984-36-4 710984-40-9 710984-44-4
710984-48-8 710984-52-4 710984-56-8
710984-60-4 710984-64-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-activity relationship studies of substituted benzamides as μ and δ opioid receptor agonists)
RN 359862-90-1 CASUS
CN Benzamide, N-ethyl-4-[[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



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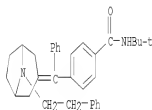
RN 359862-91-2 CAPLUS

CN Benzamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



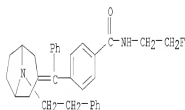
RN 359862-99-0 CAPLUS

CN Benzamide, N-[1,1-dimethylethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-00-6 CAPLUS

CN Benzamide, N-(2-fluoroethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



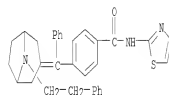
RN 359863-02-8 CAPLUS

CN Benzamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-2-thiazolyl- (CA INDEX NAME)



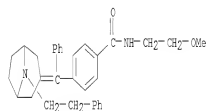
Page 385

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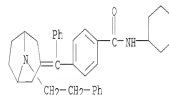
RN 359863-03-9 CAPLUS

CN Benzamide, N-(2-methoxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



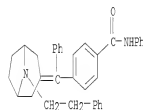
RN 359863-05-1 CAPLUS

CN Benzamide, N-cyclohexyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-06-2 CAPLUS

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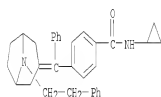


RN 359863-08-4 CAPLUS

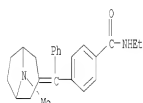
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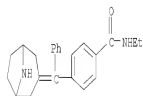
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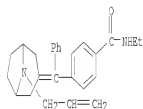
RN 359863-13-1 CASUS
CN Benzamide, N-ethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



RN 359863-14-2 CASUS
CN Benzamide, 4-[8-azabicyclo[3.2.1]oct-3-ylidenephanylmethyl]-N-ethyl- (CA INDEX NAME)

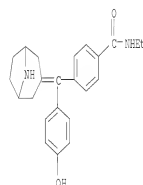


RN 359863-15-3 CASUS
CN Benzamide, N-ethyl-4-[phenyl[9-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

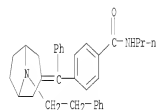


RN 359863-29-9 CASUS

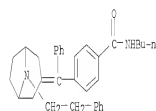
CN Benzamide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)



RN 710983-06-1 CASUS
CN Benzamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-propyl- (CA INDEX NAME)

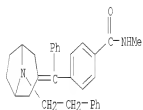


RN 710983-47-4 CASUS
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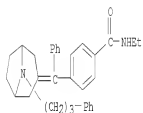


RN 710983-51-0 CASUS
CN Benzamide, N-methyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

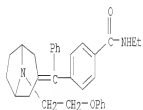
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RN 710983-71-4 CAFLUS
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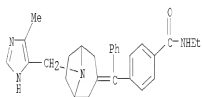
RN 710983-75-8 CAFLUS
CN Benzamide, N-ethyl-4-[(8-(2-phenoxyethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl- (CA INDEX NAME)



RN 710983-79-2 CAFLUS
CN Benzamide, N-ethyl-4-[(8-[2-(1H-indol-3-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

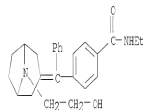
RN 710983-83-8 CAFLUS
CN Benzamide, N-ethyl-4-[(8-[(5-methyl-1H-imidazol-4-yl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl)- (9CI) (CA INDEX NAME)



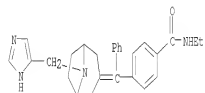
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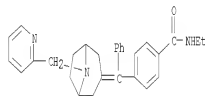
RN 710983-87-2 CAFLUS
CN Benzamide, N-ethyl-4-[[8-(2-hydroxyethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl)- (CA INDEX NAME)



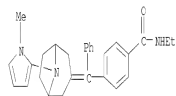
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RN 710983-94-1 CAFLUS
CN Benzamide, N-ethyl-4-[[phenyl[8-(2-pyridinylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl)- (CA INDEX NAME)



RN 710983-98-5 CAFLUS
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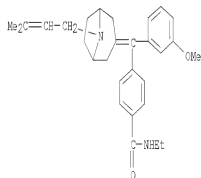


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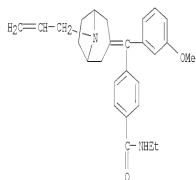
RN 710984-04-6 CAPLUS

CN Benzanide, N-ethyl-4-[(3-methoxyphenyl)[8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 710984-03-0 CAPLUS

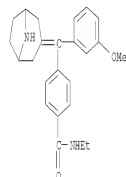
CN Benzanide, N-ethyl-4-[(3-methoxyphenyl)[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 710984-11-5 CAPLUS

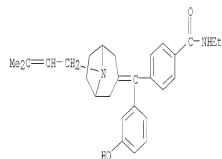
CN Benzanide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(3-methoxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

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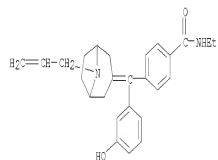
RN 710984-14-9 CAPLUS

CN Benzanide, N-ethyl-4-[(3-hydroxyphenyl)[8-(3-methyl-2-butenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 710984-17-1 CAPLUS

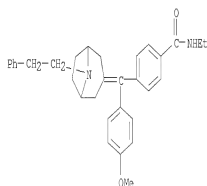
CN Benzanide, N-ethyl-4-[(3-hydroxyphenyl)[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 710984-20-6 CAPLUS

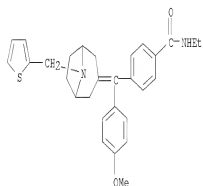
CN Benzanide, N-ethyl-4-[(4-methoxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

Print selected from 10541656.trn



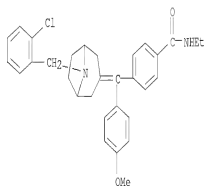
RN 710984-24-0 CASLUS

CN Benzanide, N-ethyl-4-[(4-methoxyphenyl)[8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 710984-28-4 CASLUS

CN Benzanide, 4-[[8-[(2-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene](4-methoxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

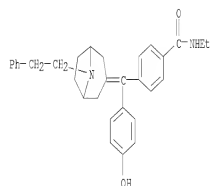


RN 710984-32-0 CASLUS

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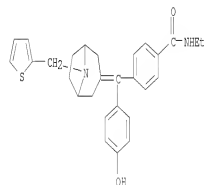
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CN Benzanide, N-ethyl-4-[(4-hydroxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



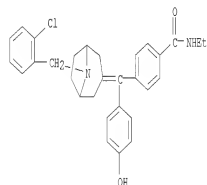
RN 710984-36-4 CASLUS

CN Benzanide, N-ethyl-4-[(4-hydroxyphenyl)[8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 710984-40-0 CASLUS

CN Benzanide, 4-[[8-[(2-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene](4-hydroxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

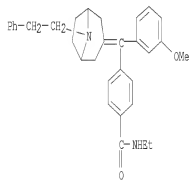


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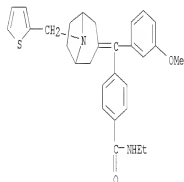
RN 710984-44-4 CAPLUS

CN Benzamide, N-ethyl-4-[(3-methoxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 710984-48-8 CAPLUS

CN Benzamide, N-ethyl-4-[(3-methoxyphenyl)[8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



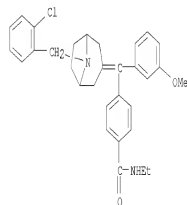
RN 710984-52-4 CAPLUS

CN Benzamide, 4-[[8-[(2-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-methoxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)



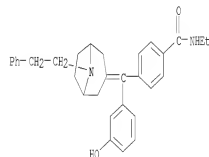
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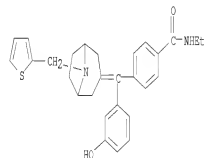
RN 710984-56-8 CAPLUS

CN Benzamide, N-ethyl-4-[(3-hydroxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 710984-60-4 CAPLUS

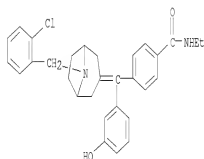
CN Benzamide, N-ethyl-4-[(3-hydroxyphenyl)[8-(2-thienylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 710984-64-8 CAPLUS

CN Benzamide, 4-[[8-[(2-chlorophenyl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene][3-hydroxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

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111 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
 2004:393271 Document No. 141:54509 N,N-Dialkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides, potent, selective δ opioid agonists. Carson, John R.; Costa, Steven J.; Codd, Ellen E.; Dax, Scott L.; Lee, Jung; Martinez, Rebecca E.; Neilson, Lou Anne; Pitts, Philip M.; Zhang, Sui-Po (Drug Discovery, Johnson and Johnson Pharmaceutical Research and Development, LLC, Spring House, PA, 15477-0776, USA). *Bioorganic & Medicinal Chemistry Letters*, 14(9), 2109-2112 (English) 2004. COCEN: BMCLEB. ISSN: 0960-894X. OTHER SOURCES: CASREACT 141:54509. Publisher: Elsevier Science B.V..

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

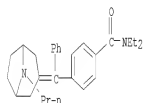
AB A series of N,N-dialkyl-4-(9-aryltropanylidenemethyl)benzamides, e.g. I, was prepared. The lead compds., II (R = H) and II (R = allyl), exhibited extremely high affinity for the δ opioid receptor with excellent selectivity vs. the μ opioid receptor. They were full agonists at the δ opioid receptor, as assessed by stimulation of GTPyS binding, and displayed antinociceptive activity.

IT 359862-84-3

RI: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
 [N,N-Dialkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides as potent and selective δ opioid agonists]

RN 359862-84-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl(8-propyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



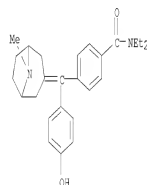
IT 705279-40-9P 705932-52-1P 705932-53-2P

RI: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

[N,N-Dialkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides as potent and selective δ opioid agonists]

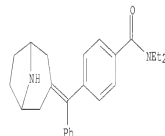
RN 705279-40-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[(4-hydroxyphenyl)(3-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 705932-52-1 CAPLUS

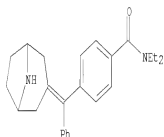
CN Benzamide, 4-[(1R,3R,5S)-8-azabicyclo[3.2.1]oct-3-ylidenephylmethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)



RN 705932-53-2 CAPLUS

CN Benzamide, 4-[(1R,3R,5S)-8-azabicyclo[3.2.1]oct-3-ylidenephylmethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

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IT 359862-73-0P 359862-74-1P 359862-75-2P

359862-76-2P 359862-77-4P 359862-79-6P

359862-86-5P 359862-87-4P 359862-92-3P

359862-93-4P 359862-94-5P 359862-95-6P

359862-97-8P 359862-98-9P 359863-10-8P

359863-10-2P 359863-31-2P 705279-36-2P

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705932-54-3P 705932-55-4P 705932-56-5P

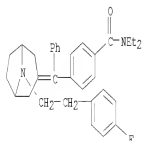
705932-57-6P 705932-58-7P 705932-59-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

[N,N-Dialkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamidates as potent and selective δ opioid agonists]

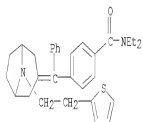
RN 359862-73-0 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-[2-(4-fluorophenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



RN 359862-74-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[[phenyl[8-(2-(2-thienyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



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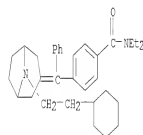
RN 359862-75-2 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-[2-(1H-indol-3-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

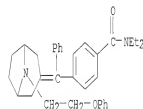
RN 359862-76-3 CAPLUS

CN Benzamide, 4-[[[8-(2-cyclohexylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



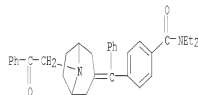
RN 359862-77-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-phenoxyethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



RN 359862-79-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-oxo-2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

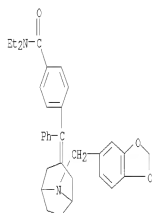


RN 359862-86-5 CAPLUS

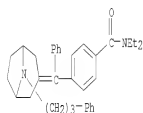
CN Benzamide, 4-[[[8-(1,3-benzodioxol-5-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



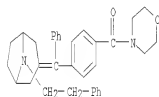
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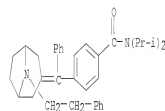
RN 359862-87-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[(phenyl[8-(3-phenylpropyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



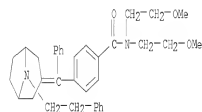
RN 359862-92-3 CAPLUS
CN Morpholine, 4-[(4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzoyl]- (9CI) (CA INDEX NAME)



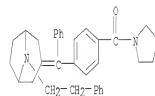
RN 359862-93-4 CAPLUS
CN Benzamide, N,N-bis(1-methylethyl)-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



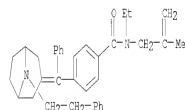
RN 359862-94-5 CAPLUS
CN Benzamide, N,N-bis(2-methoxyethyl)-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359862-95-6 CAPLUS
CN Pyrrolidine, 1-[4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzoyl]- (9CI) (CA INDEX NAME)



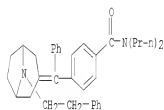
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CN Benzamide, N-ethyl-N-(2-methyl-2-propenyl)-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)



RN 359862-98-9 CAPLUS
CN Benzamide, 4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)

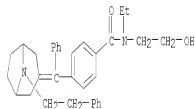
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ylidene)methyl]-N,N-diethyl- (CA INDEX NAME)



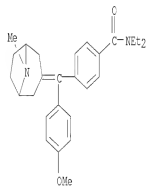
RN 359863-10-8 CAPLUS

CN Benzamide, N-ethyl-N-(2-hydroxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359863-10-2 CAPLUS

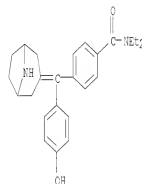
CN Benzamide, N,N-diethyl-4-[(4-methoxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359863-11-3 CAPLUS

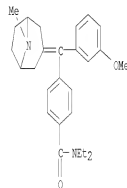
CN Benzamide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

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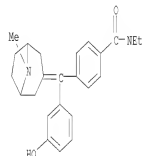
RN 705279-36-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 705279-39-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



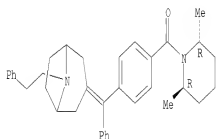
RN 705279-42-1 CAPLUS

CN Piperidine, 2,6-dimethyl-1-[4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]benzoyl]-, (2R,6R)-rel- (9CI) (CA

Print selected from 10541656.trn

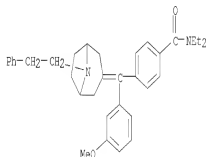
INDEX NAME

Relative stereochemistry.



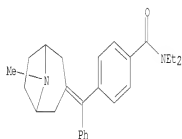
RN 705279-43-2 CASUS

CH Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 705932-54-3 CASUS

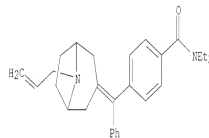
CH Benzamide, N,N-diethyl-4-[[[(1R,3Z,5S)-8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 705932-55-4 CASUS

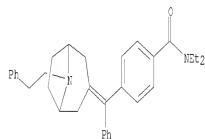
CH Benzamide, N,N-diethyl-4-[phenyl[(1R,3Z,5S)-8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

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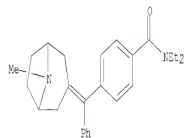
RN 705932-56-5 CASUS

CH Benzamide, N,N-diethyl-4-[phenyl[(1R,3Z,5S)-8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 705932-57-6 CASUS

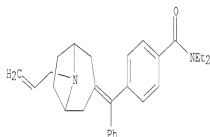
CH Benzamide, N,N-diethyl-4-[[[(1R,3E,5S)-8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 705932-58-7 CASUS

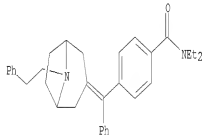
CH Benzamide, N,N-diethyl-4-[phenyl[(1R,3Z,5S)-8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

Print selected from 10541656.trn



RN 705932-59-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[phenyl[(1R,3E,5S)-8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (3CI) (CA INDEX NAME)

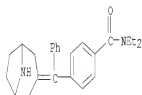


IT 359862-71-8

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent) (N,N-Dialkyl-4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamides as potent and selective δ opioid agonists)

RN 359862-71-8 CAPLUS

CN Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidenephylmethyl)-N,N-diethyl- (CA INDEX NAME)



111 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2008 ACS on SIN

2003:912953 Document No. 139:391370 Compositions and methods for combating lower urinary tract dysfunctions with delta opioid receptor agonists.

Chang, Kwei-Jen; Gemp, J. Peter; Biciunas, Kestutis P.; Ma, Xin;

Pendergast, William; Jan, Shyi-Tai (Ardent Pharmaceuticals, Inc., USA).

PCT Int. Appl. NO 2003094853 A2 20031120, 73 pp. DESIGNATED STATES: W;

Print selected from 10541656.trn

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, ST, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PG, PI, SE, SN, TD, TG, TR. (English). CODEM: PINKLE. APPLICATION: NO 2003-0514730 20030509. PRIORITY: US 2002-379186P 20020509; US 2003-434004 20030508.

AB Comps. and methods for treatment of a urinary tract dysfunction by administering to a subject in need of such treatment a pharmaceutical composition including a delta opioid receptor agonist in an amount effective to reduce the effects of the urinary tract dysfunction. The comps. may further include an addnl. active agent that is used to treat urinary tract dysfunctions, e.g., alpha-adrenergic agonists, anticholinergics, alpha-adrenergic antagonists and tricyclic antidepressants.

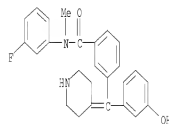
IT 625365-91-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THW (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(comps. and methods for combating lower urinary tract dysfunctions with delta opioid receptor agonists combined with other agents)

RN 625365-81-3 CAPLUS

CN Benzamide, N-[(3-fluorophenyl)-3-[(3-hydroxyphenyl)-4-piperidinylidenemethyl]-N-methyl- (CA INDEX NAME)



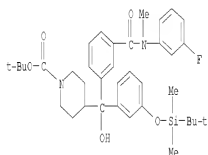
IT 625365-90-4P 625365-91-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PACT (Reactant or reagent)

(comps. and methods for combating lower urinary tract dysfunctions with delta opioid receptor agonists combined with other agents)

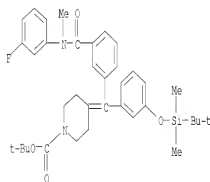
RN 625365-90-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]phenyl]-3-[[[(3-fluorophenyl)methylamino]carbonyl]phenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 625365-91-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-([3-((1,1-dimethylethyl)dimethylsilyl)oxy]phenyl)-[3-((3-fluorophenyl)methylamino)carbonylphenyl]methylene-, 1,1-dimethylethyl ester (CA INDEX NAME)



L11 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2003:567561 Document No. 140:122104 Pharmacological characterization of AR-M1000390 at human delta opioid receptors. Marie, Nicolas; Landmors, Gerard; Debout, Claire; Jauzac, Philippe; Allouche, Stephane (Laboratoire de Pharmacologie moleculaire de la tolerance aux opiaces, Universite de Caen, Caen, 14032, Fr.). Life Sciences, 73(13), 1691-1704 (English) 2003. CODEN: LIFSAR. ISSN: 0024-3205. Publisher: Elsevier Science Inc..

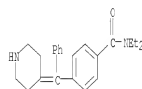
AB We investigated the pharmacol. properties of a newly synthesized δ agonist AR-M1000390, derived from SNC-80 ((+)-4-[(alpha R)-alpha-(2S,3R)-4-allyl-2,5-dimethyl-1-piperazinyl]-3-methoxybenzyl]-N,N-diethyl-benzamide), in the neuroblastoma cell line SK-N-BE expressing only human δ -opioid receptors. Binding and functional expts. showed a weak affinity (K_i = 106 \pm 14 nM) correlated with a weak potency (EC_{50} = 111 \pm 31 nM) to inhibit the forskolin-stimulated cAMP accumulation. Sustained activation of opioid receptors in the presence of the maximal inhibitory concentration of AR-M1000390 produced a rapid and strong desensitization. In order to examine the contribution of internalization and down-regulation in the desensitization processes, binding and functional expts. were conducted in the presence or in the absence of hypertonic sucrose solution to block clathrin-dependent opioid receptor endocytosis. We observed both the inability of AR-M1000390 to down-regulate

opioid receptors and the absence of any effect of sucrose on desensitization. The lack of δ -opioid receptor internalization by AR-M1000390 was further corroborated by confocal microscopy using antibodies directed either against the endogenous δ -opioid receptors or the FLAG-tagged δ -opioid receptors stably expressed in the SK-N-BE cells. These data suggest that uncoupling rather than internalization is responsible for δ -opioid receptors desensitization by AR-M1000390.

IT 209808-01-5, AR-M1000390
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); BIOG (Biological study)
(pharmacol. characterization of AR-M1000390 at human delta opioid receptors)

RN 209808-01-5 CAPLUS

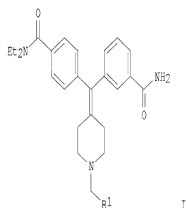
CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)- (CA INDEX NAME)



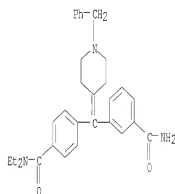
L11 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2003:282537 Document No. 138:304167 Preparation of 4-[(piperidin-4-ylidene)(3-carbamoylphenyl)methyl]benzamide for the treatment of pain, spinal injuries or gastrointestinal disorders. Brown, William; Walpole, Christopher; Wei, Zhongyong (AstraZeneca Ab, Swed.). PCT Int. Appl. No. 2003/029215 A1 20030410, 30 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CR, CU, CE, DE, DK, DM, DZ, EC, EG, ES, FI, GE, GD, GG, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NI, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RA: AT, BG, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIIQD2. APPLICATION: NO 2002-561804 20021002. PRIORITY: SE 2001-3313 20011003.

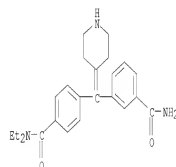
G1



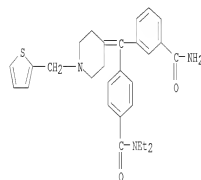
- AB The title comds. [I; R1 = (un)substituted Ph, pyridinyl, thienyl, furanyl, imidazolyl, pyrrolyl and triazolyl], useful in therapy, in particular in the management of pain, were prepared. E.g., a 4-step synthesis of ten comds. I [R1 = 2- and 3-thienyl, 2- and 3-furanyl, 2-, 3- and 4-pyridyl, 2-pyrrolyl, 4-imidazolyl, 2-thiazolyl], was given. The comds. I were tested in vitro in human 2938 cells expressing cloned human μ , δ and κ receptors, and in mouse and rat brains (biol. data given). Thus, compound I [R1 = 2-thienyl] showed IC50 of 0.373 nM against human δ receptor binding.
- IT 508223-83-4P 508223-84-5P
 RI: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USDS (Uses)
 (preparation of 4-[[piperidin-4-ylidene](3-carbamoylphenyl)methyl]benzamides for the treatment of pain, spinal injuries or gastrointestinal disorders)
- RN 508223-83-4 CAPLUS
 CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



- RN 508223-84-5 CAPLUS
 CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

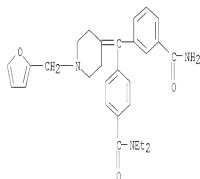


- IT 508223-70-9P 508223-71-0P 508223-72-1P
 508223-73-2P 508223-74-3P 508223-75-4P
 508223-76-5P 508223-77-6P 508223-78-7P
 508223-79-8P 508223-85-6P
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USDS (Uses)
 (preparation of 4-[[piperidin-4-ylidene](3-carbamoylphenyl)methyl]benzamides for the treatment of pain, spinal injuries or gastrointestinal disorders)
- RN 508223-70-9 CAPLUS
 CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



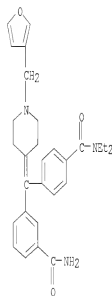
- RN 508223-71-0 CAPLUS
 CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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RN 508223-72-1 CAPLUS

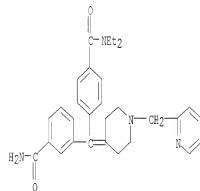
CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(3-furylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 508223-73-2 CAPLUS

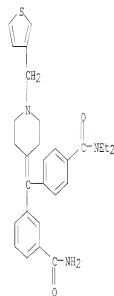
CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

Print selected from 10541656.trn



RN 508223-74-3 CAPLUS

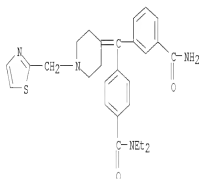
CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 508223-75-4 CAPLUS

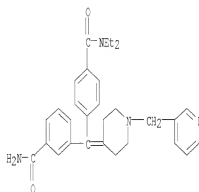
CN Benzamide, 4-[[[3-(aminocarbonyl)phenyl][1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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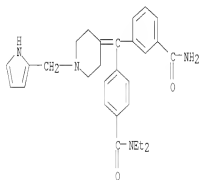
RN 508223-76-5 CAPLUS

CN Benzanide, 4-[[[3-(aminocarbonyl)phenyl][1-(3-pyridylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 508223-77-6 CAPLUS

CN Benzanide, 4-[[[3-(aminocarbonyl)phenyl][1-(1H-pyrrol-2-ylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

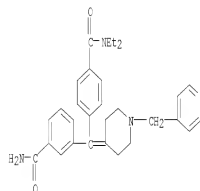


RN 508223-78-7 CAPLUS

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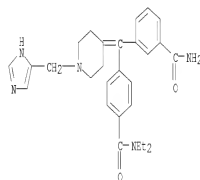
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CN Benzanide, 4-[[[3-(aminocarbonyl)phenyl][1-(4-pyridylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 508223-79-8 CAPLUS

CN Benzanide, 4-[[[3-(aminocarbonyl)phenyl][1-(1H-imidazol-4-ylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (9CI) (CA INDEX NAME)



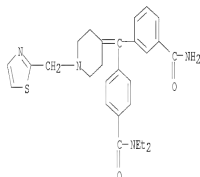
RN 508223-85-6 CAPLUS

CN Benzanide, 4-[[[3-(aminocarbonyl)phenyl][1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, hydrochloride (2:5) (CA INDEX NAME)



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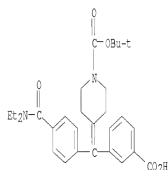
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● 5/2 BCL

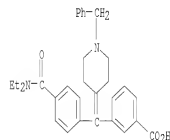
IT 508223-01-1P 508223-01-2P 508223-02-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of 4-[(piperidin-4-ylidene)(3-carbamoylphenyl)methyl]benzamides for the treatment of pain, spinal injuries or gastrointestinal disorders)

RN 508223-01-1 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[(3-carboxyphenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1-(1,1-dimethylethyl) ester (CA INDEX NAME)

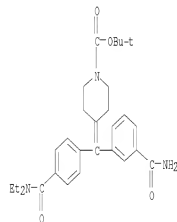


RN 508223-01-2 CAPLUS
 CN Benzoic acid, 3-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)

Print selected from 10541656.trn



RN 508223-02-3 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[(3-(aminocarbonyl)phenyl)[4-[(diethylamino)carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



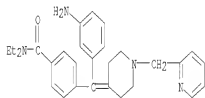
L11 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
 2003:190693 Document No. 139:101002 Synthesis of N, N-diethyl-4-[phenyl-(piperidin-4-ylidene)methyl]-[carboxy-14C]benzamide, a potent δ opioid receptor agonist. Gawell, Lars (Department of Chemistry, AstraZeneca R and D, Ville Saint-Laurent, QC, H4S 1Z3, Can.). Journal of Labelled Compounds & Radiopharmaceuticals, 46(2), 131-138 (English) 2003. CODEN: JLCRD4. ISSN: 0362-4803. OTHER SOURCES: CASREACT 139:101002. Publisher: John Wiley & Sons Ltd..

AB The synthesis of carbon-14 labeled N,N-diethyl-4-[phenyl-(piperidin-4-ylidene)methyl]-benzamide is described. The radioisotope is introduced via an aryllithium reaction with $^{14}\text{CO}_2$ to form the labeled acid, which is subsequently transformed into the amide.

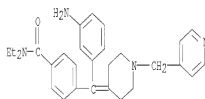
IT 557795-50-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (deprotection of; preparation of carbon 14-labeled diethylphenylpiperidinyldeneethylcarboxybenzamide via multi-step synthetic route)

RN 557795-50-3 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]-

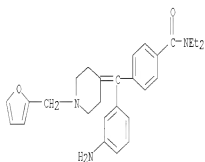
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RN 477185-76-5 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)[1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

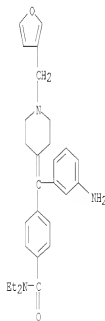


RN 477185-77-6 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)[1-(2-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

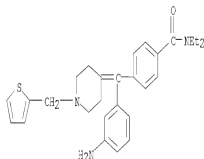


RN 477185-78-7 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)[1-(3-furanylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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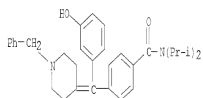
RN 477185-79-8 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)[1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)



RN 477185-80-1 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)[1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl- (CA INDEX NAME)

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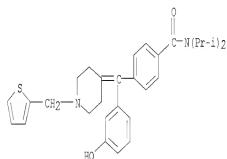
INDEX NAME



● 9/5 HCl

RN 477192-40-8 CAPLUS

CN Benzanide, 4-[(3-hydroxyphenyl)[1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

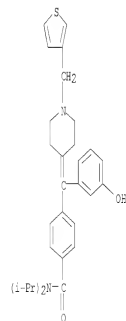


RN 477192-41-9 CAPLUS

CN Benzanide, 4-[(3-hydroxyphenyl)[1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

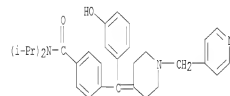
Page 425

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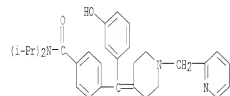
RN 477192-42-0 CAPLUS

CN Benzanide, 4-[(3-hydroxyphenyl)[1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



RN 477192-43-1 CAPLUS

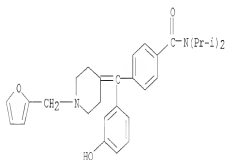
CN Benzanide, 4-[(3-hydroxyphenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



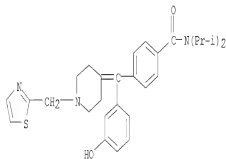
RN 477192-44-2 CAPLUS

CN Benzanide, 4-[(1-(2-furanyl)-4-piperidinylidene)(3-hydroxyphenyl)methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

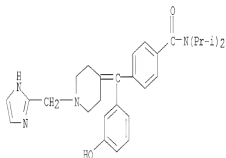
Page 426



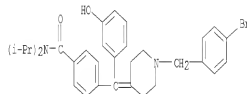
RN 477192-45-3 CAELUS
CN Benzamide, 4-[(3-hydroxyphenyl)[1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



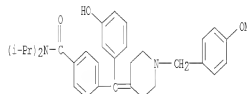
RN 477192-46-4 CAELUS
CN Benzamide, 4-[(3-hydroxyphenyl)[1-(16-imidazol-2-ylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



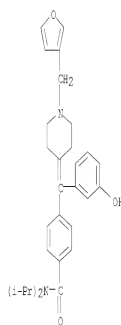
RN 477192-47-5 CAELUS
CN Benzamide, 4-[[1-[(4-bromophenyl)methyl]-4-piperidinylidene](3-hydroxyphenyl)methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



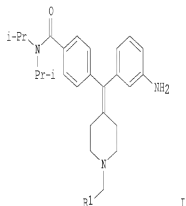
RN 477192-48-6 CAELUS
CN Benzamide, 4-[(3-hydroxyphenyl)[1-[(4-methoxyphenyl)methyl]-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



RN 477192-49-7 CAELUS
CN Benzamide, 4-[[1-(3-furanyl)methyl]-4-piperidinylidene](3-hydroxyphenyl)methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



RN 477192-50-0 CAELUS
CN Benzamide, 4-[[1-(3-hydroxyphenyl)[1-(1H-pyrrol-2-ylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



AB The title compds. [I; R1 = (un)substituted Ph, pyridyl, pyrrolyl, thienyl, furanyl, imidazolyl, triazolyl, thiazolyl and pyridyl N-oxide], useful in therapy, in particular in the management of pain, anxiety and functional gastrointestinal disorders, were prepared and formulated. E.g., two alternative multi-step prepgs. of the benzamide I [R1 = Ph], were given. The exemplified compds. I showed IC50 of 0.78-4.85 nM against δ receptor binding.

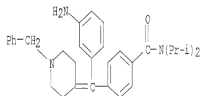
II 477185-85-6P 477185-86-7P 477185-87-8P
477185-88-9P 477185-89-0P 477185-90-3P
477185-91-4P 477185-92-5P 477185-93-6P
477185-94-7P 477185-95-8P 477185-96-9P
477185-97-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-(phenyl-piperidin-4-ylidene-methyl)-benzamides as δ opioid receptor agonists for the treatment of pain, anxiety or gastrointestinal disorders)

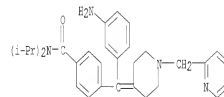
RN 477185-85-6 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



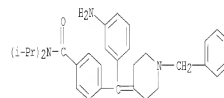
RN 477185-86-7 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



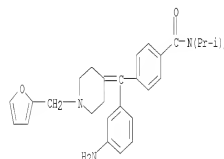
RN 477185-87-8 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)[1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



RN 477185-88-9 CAPLUS

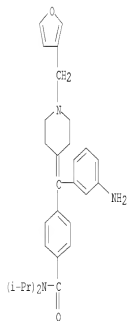
CN Benzamide, 4-[(3-aminophenyl)[1-(2-furanyl-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



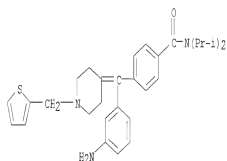
RN 477185-89-0 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)[1-(3-furanyl-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

Print selected from 10541656.trn

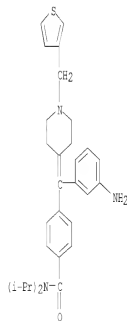


RN 477185-90-3 CAPLUS
CN Benzamide, 4-[(3-amino-4-[[1-(2-thienylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

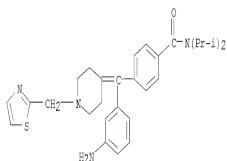


RN 477185-91-4 CAPLUS
CN Benzamide, 4-[(3-amino-4-[[1-(3-thienylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

Print selected from 10541656.trn

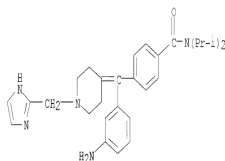


RN 477185-92-5 CAPLUS
CN Benzamide, 4-[(3-amino-4-[[1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



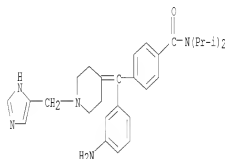
RN 477185-93-6 CAPLUS
CN Benzamide, 4-[(3-amino-4-[[1-(1H-imidazol-2-ylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

Print selected from 10541656.trn



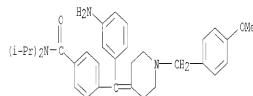
RN 477185-94-7 CAPLUS

CN Benzanide, 4-[(3-aminophenyl)[1-(1H-imidazol-4-ylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (9CI) (CA INDEX NAME)



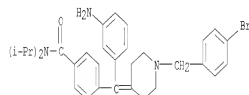
RN 477185-95-8 CAPLUS

CN Benzanide, 4-[(3-aminophenyl)[1-[(4-methoxyphenyl)methyl]-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



RN 477185-96-9 CAPLUS

CN Benzanide, 4-[(3-aminophenyl)[1-[(4-bromophenyl)methyl]-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

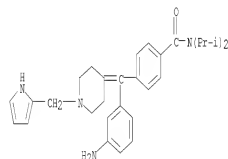


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Print selected from 10541656.trn

RN 477185-97-0 CAPLUS

CN Benzanide, 4-[(3-aminophenyl)[1-(1H-pyrrol-2-ylmethyl)-4-piperidinylidene]methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



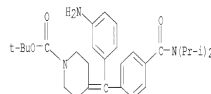
IT 477185-98-1P 477185-99-2P 477186-01-9P

RL: RCT (Reactant); SEN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-[phenyl-piperidin-4-ylidene-methyl]-benzanides as δ opioid receptor agonists for the treatment of pain, anxiety or gastrointestinal disorders)

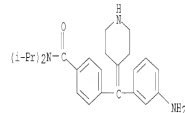
RN 477185-98-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(3-aminophenyl)[4-[[bis(1-methylethyl)amino]carbonyl]phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 477185-99-2 CAPLUS

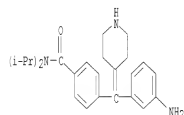
CN Benzanide, 4-[(3-aminophenyl)-4-piperidinylidenemethyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



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RN 477186-01-9 CAPLUS

CN Benzamide, 4-[(3-aminophenyl)-4-piperidinylidenemethyl]-N,N-bis(1-methylethyl)-, hydrochloride (2:7) (CA INDEX NAME)



● 9/2 EC1

L11 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM

2002:67833 Document No. 136:363220 Interaction of nonpeptidic δ agonists with P-glycoprotein by in situ mouse brain perfusion: liquid chromatography-mass spectrometry analysis and internal standard strategy. Degens, Claude; Ducharme, Julie; Pollack, Gary M. (Division of Drug Delivery and Disposition, School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599-7360, USA). Journal of Pharmaceutical Sciences, 91(1), 244-252 (English) 2002. CODEN: JPMSAE. ISSN: 0022-3549. Publisher: Wiley-Liss, Inc..

AB Many opioids are substrates of the efflux transporter P-glycoprotein (P-gp) in the blood-brain barrier (BBB). In situ brain perfusion in wild-type and mdr 1a(-/-) P-gp-deficient mice was utilized to investigate potential P-gp-mediated transport of novel nonpeptidic δ agonists (AR-N δ compounds). Because radioactive compounds were not available for this series, liquid chromatography-mass spectrometric detection (LC-MS) was the assay method of choice. Verapamil in the perfusion buffer (0.5 μ M) served as a pos. control for P-gp-mediated efflux and as an exptl. internal standard for P-gp modulation by AR-N δ compounds. LC-MS provided excellent assay sensitivity with no significant interferences. In P-gp-competent mice, the brain extraction of AR-N δ compounds ranged from 1.1 to 96%. The ratio of initial brain uptake clearances (Clup) in P-gp-deficient and wild-type mice (P-gp effect) ranged from 0.96 to 4.91. Some compounds increased the Clup of verapamil in P-gp-competent mice, consistent with P-gp inhibition. These results demonstrate that LC-MS is an appropriate assay method. For mouse brain perfusion samples, that AR-N δ compounds may interact with P-gp in the BBB, and that the internal strategy can provide useful information concerning P-gp modulation by compounds of interest.

IT 203808-01-50, derive.

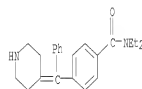
RI: PKI (Pharmacokinetics); BIOD (Biological study)

(Interaction of nonpeptidic δ opioid agonists with P-glycoprotein by in situ mouse brain perfusion using liquid chromatography-mass spectrometry anal. and internal standard strategy)

RN 203808-01-5 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)- (CA INDEX

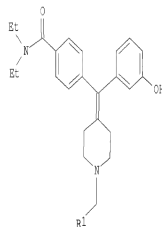
NAME)



L11 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM

2001:747777 Document No. 135:268700 Preparation of N,N-diethyl-4-(3-hydroxyphenyl)piperidin-4-ylidenemethylbenzamide derivatives useful in the management of pain. Brown, William; Walpole, Christopher (Astrazeneca Ab, Swed.). PCT Int. Appl. WO 2001074804 A1 20011011, 48 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BY, BE, CA, CH, CN, CO, CR, CU, CI, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AE, BY, KG, KZ, MD, RU, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AE, BY, KG, KZ, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXX22. APPLICATION: WO 2001-52707 20010330. PRIORITY: SE 2000-1207 20000404.

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AB Compds. I and their pharmaceutically acceptable salts, (R1 = Ph, pyridinyl, thieryl, furanyl, imidazolyl, triazolyl and thiazolyl; each R1 on ring and R1 lactoneam. ring may optionally and independently be further substituted by 1, 2 or 3 substituents selected from straight and branched C1-C6 alkyl, W02, CF3, C1-C6 alkoxy, chloro, fluoro, bromo, and

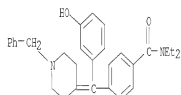
iodo) were prepared. Thus, a multi-step synthesis of I (R1 = Ph) was presented. The prepared comds. are useful in the management of pain. Biol. data for comds. I were given.

IT 364757-40-4P 364757-41-5P 364757-42-6P
364757-43-7P 364757-44-8P 364757-45-9P
364757-46-0P 364757-47-1P 364757-48-2P
364757-49-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); THU (Therapeutic use); BIOU (Biological study); PRGP (Preparation); USES (Uses)
(preparation of diethyl(hydroxyphenyl)piperidinylidenemethyl)benzamide
derivative useful in management of pain)

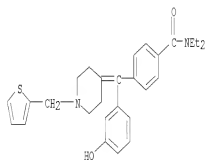
RN 364757-40-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



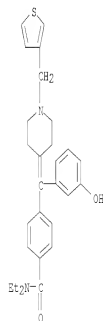
RN 364757-41-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(2-thienylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



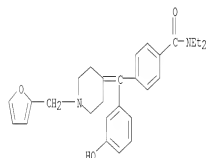
RN 364757-42-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(3-thienylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 364757-43-7 CAPLUS

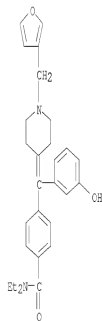
CN Benzamide, N,N-diethyl-4-[(1-(2-furanylmethyl)-4-piperidinylidene)(3-hydroxyphenyl)methyl]- (CA INDEX NAME)



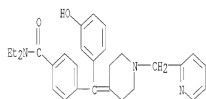
RN 364757-44-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(1-(3-furanylmethyl)-4-piperidinylidene)(3-hydroxyphenyl)methyl]- (CA INDEX NAME)

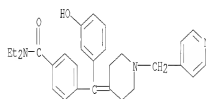
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RN 364757-45-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



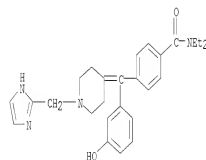
RN 364757-46-0 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



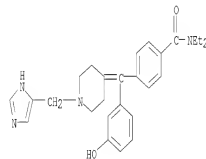
RN 364757-47-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(1H-imidazol-2-ylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)

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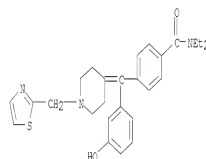
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RN 364757-48-2 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(1H-imidazol-4-ylmethyl)-4-piperidinylidene]methyl]- (9CI) (CA INDEX NAME)



RN 364757-49-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)[1-(2-thiazolylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)

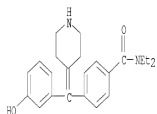


IT 364757-38-0P
RU: RCT (Reactant); SPH (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diethyl(hydroxyphenylpiperidinylidenemethyl)benzamide derivs. useful in management of pain)

RN 364757-38-0 CAPLUS

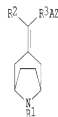
Page 442

CM Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)-4-piperidinylidenemethyl]-
(CA INDEX NAME)



111 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
2001:476766 Document No. 135:242144 Preparation of 3-(diarylmethylene)-8-azabicyclo[3.2.1]octanes as δ - or μ -opioid receptor modulators..
Carson, John R.; Coats, Steven J.; Neilson, Lou Anne; Wu, Wu-Wan; Boyd, Robert S.; Patis, Philip M. (Ortho-McNeil Pharmaceutical, Inc., USA). PCT Int. Appl. WO 2001046543 A2 20010913, 75 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DO, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TR, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM; BW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NI, PT, SE, SN, TD, TG, TR. (English).
CODEN: PIKX02. APPLICATION: WO 2001-US5735 20010222. PRIORITY: US 2000-PV186778 20000303.

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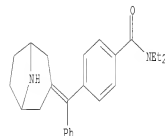
AB Title compds. [I; R1 = H, alkyl, haloalkyl, alkenyl, alkoxyalkenyl, alkynyl, alkoxyalkynyl, cycloalkyl, (substituted) heterocyclyl, heterocyclylalkyl, aryl, aralkyl, etc.; R2, R3 = (substituted) aryl, heteroaryl; A = CM, SO2; X = O, S; Z = OR4, NR56; R4-R6 = H, (substituted) alkyl, alkoxyalkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, etc.), were prepared. Thus, tropanone and N,N-diethyl-4-benzoylbenzamide (preparation given) in THF were added to a prefluoresced mixture of TlCl4 and Zn in THF followed by 3 h reflux to give N,N-diethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzamide hydrochloride. The latter at 150 μ moles/kg orally in mice gave 87% inhibition of acetylcholine bromide-induced abdominal constriction.

Depending on their agonist or antagonist effect, I are analgesics, immunosuppressants, antiinflammatory agents, neurol. and psychiatric drugs, medicaments for drug and alc. abuse, agents for treating gastritis and diarrhea, cardiovascular agents and agents for the treatment of respiratory diseases.

II 360563-54-8P 360563-56-0P 360563-59-3P
360563-60-6P
RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diarylmethylenesazabicyclooctanes as δ - or μ -opioid receptor modulators)
RN 360563-54-8 CAPLUS
CN Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, (+), (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRM 360563-53-7
CME C25 H30 N2 O



CM 2

CRM 110-17-8
CME C4 H4 O4

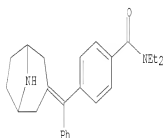
Double bond geometry as shown.



RN 360563-56-0 CAPLUS
CN Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, (-), (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRM 360563-55-9
CME C25 H30 N2 O



CM 2

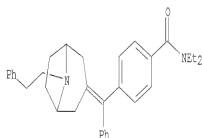
CEW 110-17-8
CME C4 H4 O4

Double bond geometry as shown.



RN 360563-59-3 CAPLUS

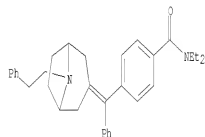
CN Benzamide, N,N-diethyl-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride, (-)- (9CI) (CA INDEX NAME)



● HCl

RN 360563-60-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride, (+)- (9CI) (CA INDEX NAME)



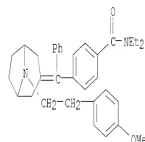
● HCl

IT 359863-16-4Q 359863-16-6P

RL BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RMT (Reactant or reagent); USES (Uses)
(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

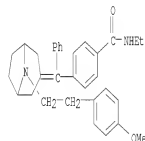
RN 359863-16-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



RN 359863-18-6 CAPLUS

CN Benzamide, N-ethyl-4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)

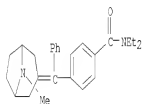


IT 359862-70-7P 359862-71-8P 359862-72-9P
 359862-73-0P 359862-74-1P 359862-75-2P
 359862-76-3P 359862-77-4P 359862-78-5P
 359862-79-6P 359862-80-9P 359862-81-0P
 359862-82-1P 359862-83-2P 359862-84-3P
 359862-85-4P 359862-86-5P 359862-87-6P
 359862-88-7P 359862-90-1P 359862-91-2P
 359862-92-3P 359862-93-4P 359862-94-5P
 359862-95-6P 359862-96-7P 359862-97-8P
 359862-98-9P 359862-99-0P 359863-00-6P
 359863-02-8P 359863-03-9P 359863-04-0P
 359863-05-1P 359863-06-2P 359863-07-3P
 359863-08-4P 359863-09-5P 359863-10-8P
 359863-11-9P 359863-12-0P 359863-13-1P
 359863-14-2P 359863-15-3P 359863-17-5P
 359863-19-7P 359863-20-0P 359863-21-1P
 359863-22-2P 359863-23-3P 359863-24-4P
 359863-25-5P 359863-26-6P 359863-27-7P
 359863-28-8P 359863-29-9P 359863-30-2P
 359863-31-3P 359863-32-4P 359863-33-5P
 359863-34-6P 359863-35-7P 359863-36-8P
 359863-37-9P 359863-39-1P 359863-43-7P
 359863-44-8P 359863-52-8P 359863-72-2P
 360563-58-2P 360563-62-8P 360563-63-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); THU (Therapeutic use); B10L (Biological study); PRPP (Preparation); USES (Uses)
 (preparation of diarylmethylazabicyclooctanes as δ - or μ -opioid receptor modulators)

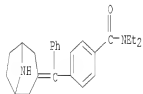
RN 359862-70-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



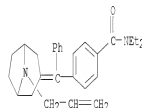
RN 359862-71-8 CAPLUS

CN Benzamide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



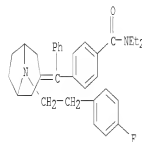
RN 359862-72-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)



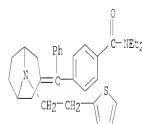
RN 359862-73-0 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-[2-(4-fluorophenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



RN 359862-74-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-(2-thienyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359862-75-2 CAPLUS

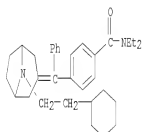
CN Benzamide, N,N-diethyl-4-[[8-[2-(1H-indol-3-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 359862-76-3 CAPLUS

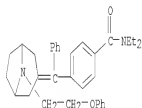
CN Benzamide, 4-[[8-(2-cyclohexylethyl)-8-azabicyclo[3.2.1]oct-3-

ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



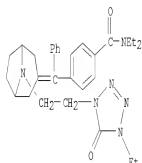
RN 359862-77-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-phenoxyethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



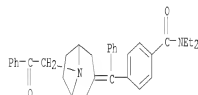
RN 359862-78-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-(4-ethyl-4,5-dihydro-5-oxo-1H-tetrazol-1-yl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



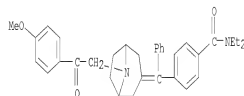
RN 359862-79-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-oxo-2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



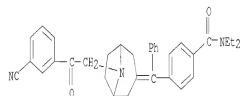
RN 359862-80-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[[8-(2-(4-methoxyphenyl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



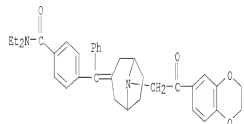
RN 359862-81-0 CAPLUS

CN Benzamide, 4-[[8-(2-(3-cyanophenyl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



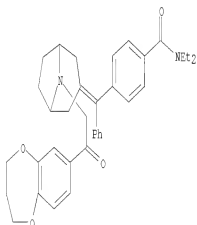
RN 359862-82-1 CAPLUS

CN Benzamide, 4-[[8-(2-(2,3-dihydro-1,4-benzodioxin-6-yl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)

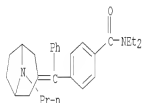


RN 359862-83-2 CAPLUS

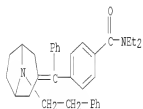
CN Benzamide, 4-[[8-(2-(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)-2-oxoethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



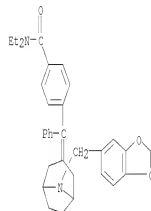
RN 359862-84-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[phenyl[8-propyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



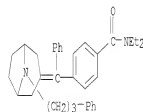
RN 359862-85-4 CAPLUS
CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



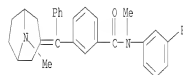
RN 359862-86-5 CAPLUS
CN Benzamide, 4-[[8-(1,3-benzodioxol-5-yl)methyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl-N,N-diethyl- (CA INDEX NAME)



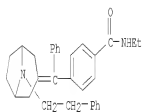
RN 359862-87-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[phenyl[8-(3-phenylpropyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



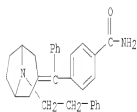
RN 359862-88-7 CAPLUS
CN Benzamide, N-(3-fluorophenyl)-N-methyl-3-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



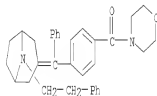
RN 359862-90-1 CAPLUS
CN Benzamide, N-ethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



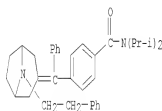
RN 359862-91-2 CASUS
CN Benzanide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)



RN 359862-92-3 CASUS
CN Morpholine, 4-[4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzoyl]- (9CI) (CA INDEX NAME)

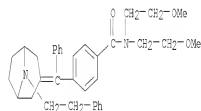


RN 359862-93-4 CASUS
CN Benzanide, N,N-bis(1-methylethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

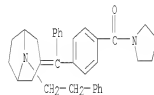


RN 359862-94-5 CASUS
CN Benzanide, N,N-bis(2-methoxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-

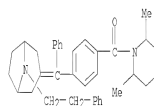
azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



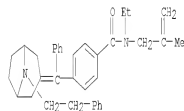
RN 359862-95-6 CASUS
CN Fyrrolidine, 1-[4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 359862-96-7 CASUS
CN Piperidine, 2,6-dimethyl-1-[4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzoyl]- (9CI) (CA INDEX NAME)

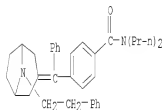


RN 359862-97-8 CASUS
CN Benzanide, N-ethyl-N-(2-methyl-2-propenyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (9CI) (CA INDEX NAME)

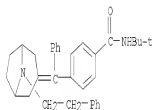


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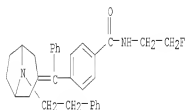
RN 359862-98-9 CAPLUS
CN Benzamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N,N-dipropyl- (CA INDEX NAME)



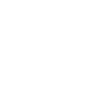
RN 359862-99-0 CAPLUS
CN Benzamide, N-[1,1-dimethylethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-00-6 CAPLUS
CN Benzamide, N-(2-fluoroethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

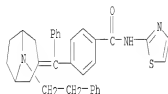


RN 359863-02-8 CAPLUS
CN Benzamide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-N-2-thiazolyl- (CA INDEX NAME)

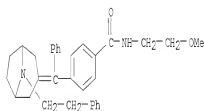


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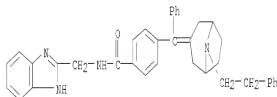
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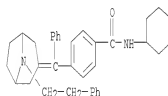
RN 359863-03-9 CAPLUS
CN Benzamide, N-(2-methoxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-04-0 CAPLUS
CN Benzamide, N-[1H-benzimidazol-2-ylmethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-05-1 CAPLUS
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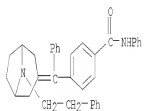


RN 359863-06-2 CAPLUS
CN Benzamide, N-phenyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



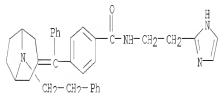
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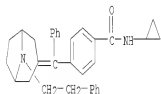
RN 359863-07-3 CAPLUS

CN Benzamide, N-[2-(1H-imidazol-2-yl)ethyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



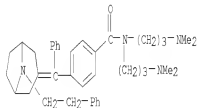
RN 359863-08-4 CAPLUS

CN Benzamide, N-cyclopropyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



RN 359863-09-5 CAPLUS

CN Benzamide, N,N-bis[3-(dimethylamino)propyl]-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

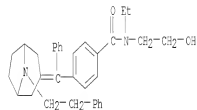


RN 359863-10-8 CAPLUS

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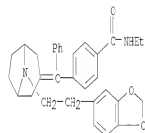
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CN Benzamide, N-ethyl-N-(2-hydroxyethyl)-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



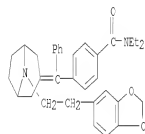
RN 359863-11-9 CAPLUS

CN Benzamide, 4-[[8-[2-(1,3-benzodioxol-5-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N-ethyl- (CA INDEX NAME)



RN 359863-12-0 CAPLUS

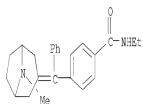
CN Benzamide, 4-[[8-[2-(1,3-benzodioxol-5-yl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



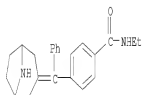
RN 359863-13-1 CAPLUS

CN Benzamide, N-ethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)

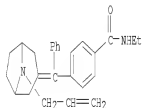
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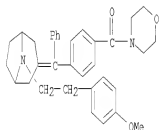
RN 359863-14-2 CAPLUS
CN Benzanide, N,N-bis(2-methoxyethyl)-4-[(8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N-methyl- (CA INDEX NAME)



RN 359863-15-3 CAPLUS
CN Benzanide, N-ethyl-4-[(phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (9CI) (CA INDEX NAME)

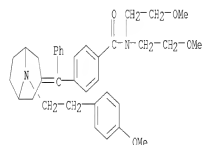


RN 359863-17-5 CAPLUS
CN Morpholine, 4-[[4-[[8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzoyl]- (9CI) (CA INDEX NAME)

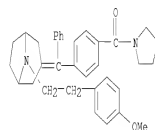


RN 359863-19-7 CAPLUS

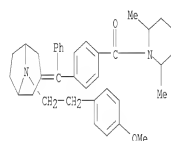
CN Benzanide, N,N-bis(2-methoxyethyl)-4-[(8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]- (CA INDEX NAME)



RN 359863-20-0 CAPLUS
CN Pyrrolidine, 1-[[4-[[8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzoyl]- (9CI) (CA INDEX NAME)

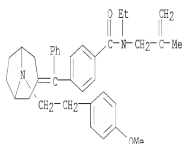


RN 359863-21-1 CAPLUS
CN Piperidine, 1-[[4-[[8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]benzoyl]-2,6-dimethyl- (9CI) (CA INDEX NAME)



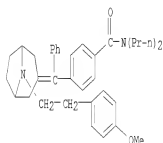
RN 359863-22-2 CAPLUS
CN Benzanide, N-ethyl-4-[[8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N-(2-methyl-2-propenyl)- (9CI) (CA INDEX NAME)

Print selected from 10541656.trn



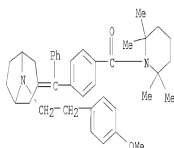
RN 359863-23-3 CAPLUS

CN Benzanide, 4-[[6-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-dipropyl- (CA INDEX NAME)



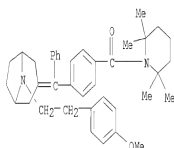
RN 359863-24-4 CAPLUS

CN Piperidine, 1-[[4-[[8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



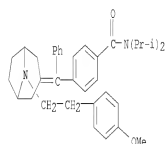
RN 359863-25-5 CAPLUS

CN Benzanide, 4-[[6-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)



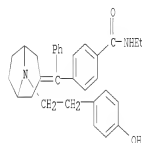
Page 461

Print selected from 10541656.trn



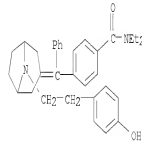
RN 359863-26-6 CAPLUS

CN Benzanide, N-ethyl-4-[[6-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)



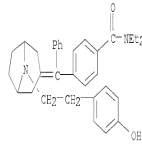
RN 359863-27-7 CAPLUS

CN Benzanide, N,N-diethyl-4-[[6-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

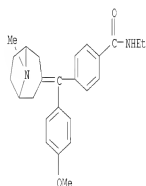


RN 359863-28-8 CAPLUS

CN Benzanide, N-ethyl-4-[[6-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]- (CA INDEX NAME)

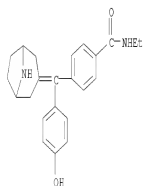


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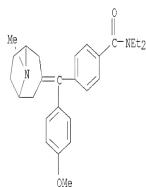
RN 359863-23-9 CAPLUS

CN Benzanide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)



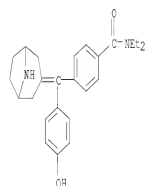
RN 359863-10-2 CAPLUS

CN Benzanide, N,N-diethyl-4-[(4-methoxyphenyl)(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



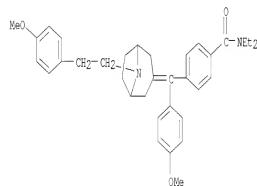
RN 359863-31-3 CAPLUS

CN Benzanide, 4-[8-azabicyclo[3.2.1]oct-3-ylidene(4-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



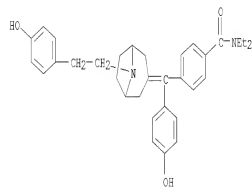
RN 359863-32-4 CAPLUS

CN Benzanide, N,N-diethyl-4-[(4-methoxyphenyl)(8-[2-(4-methoxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



RN 359863-33-5 CAPLUS

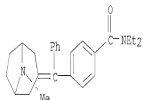
CN Benzanide, N,N-diethyl-4-[(4-hydroxyphenyl)(8-[2-(4-hydroxyphenyl)ethyl]-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- (CA INDEX NAME)



Print selected from 10541656.trn

RN 359863-34-6 CAPLUS

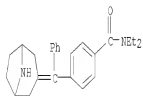
CN Benzanide, N,N-diethyl-4-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



• HCl

RN 359863-35-7 CAPLUS

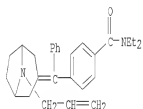
CN Benzanide, 4-[(8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



• HCl

RN 359863-36-8 CAPLUS

CN Benzanide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



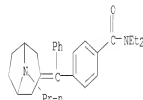
• HCl

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RN 359863-37-9 CAPLUS

CN Benzanide, N,N-diethyl-4-[phenyl(8-propyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



• HCl

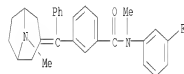
RN 359863-39-1 CAPLUS

CN Benzanide, N-(3-fluorophenyl)-N-methyl-3-[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)phenylmethyl]-, (2E)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 359862-88-7

CMF C29 H29 F N2 O



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.

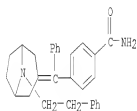


RN 359863-43-7 CAPLUS

CN Benzanide, 4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

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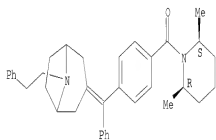


● HCl

RN 359863-44-8 CASUS

CN Piperidine, 2,6-dimethyl-1-[4-(phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]benzoyl]-, (2R,6S)-rel- (9CI) (CA INDEX NAME)

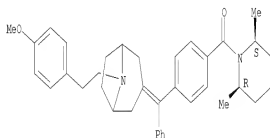
Relative stereochemistry.



RN 359863-52-8 CASUS

CN Piperidine, 1-[4-[[8-(2-(4-methoxyphenyl)ethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]phenylmethyl]benzoyl]-2,6-dimethyl-, (2R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

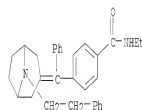


RN 359863-12-2 CASUS

CN Benzamide, N-ethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

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Print selected from 10541656.trn



● HCl

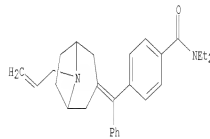
RN 360563-58-2 CASUS

CN Benzamide, N,N-diethyl-4-[phenyl[8-(2-propenyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, (-)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 360563-57-1

CME C28 H34 N2 O



CM 2

CRN 110-17-8

CME C4 H4 O4

Double bond geometry as shown.

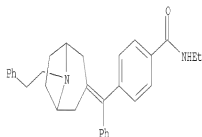


RN 360563-62-8 CASUS

CN Benzamide, N-ethyl-4-[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride, (-)- (9CI) (CA INDEX NAME)

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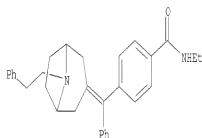
Print selected from 10541656.trn



● HCl

RN 360563-63-9 CASUS

CN Benzamide, N-ethyl-4-[[phenyl[8-(2-phenylethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]-, monohydrochloride, (+)- (SCT) (CA INDEX NAME)



● HCl

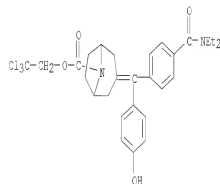
IT 359863-60-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

RN 359863-60-8 CASUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[[4-[(diethylamino)carbonyl]phenyl](4-hydroxyphenyl)methylene]-, 2,2,2-trichloroethyl ester (CA INDEX NAME)

Print selected from 10541656.trn



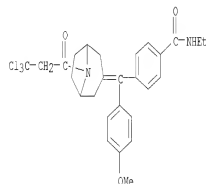
IT 359863-54-0P 359863-55-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)

(preparation of diarylmethyleneazabicyclooctanes as δ - or μ -opioid receptor modulators)

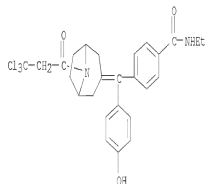
RN 359863-54-0 CASUS

CN Benzamide, N-ethyl-4-[[4-methoxyphenyl][8-(3,3,3-trichloro-1-oxopropyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)

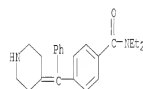


RN 359863-55-1 CASUS

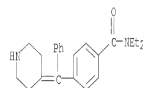
CN Benzamide, N-ethyl-4-[[4-(4-hydroxyphenyl)[8-(3,3,3-trichloro-1-oxopropyl)-8-azabicyclo[3.2.1]oct-3-ylidene]methyl]- (CA INDEX NAME)



- 111 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM
 2000:653166 Document No. 134:4937 N,N-Diethyl-4-(phenylpiperidin-4-ylidenemethyl)benzamide: A Novel, Exceptionally Selective, Potent δ Opioid Receptor Agonist with Oral Bioavailability and Its Analogs. Wei, Zhong-Yong; Brown, William; Takasaki, Bryan; Plobeck, Niklas; Delorme, Daniel; Zhou, Fei; Yang, Hua; Jones, Paul; Gwll, Lars; Gagnon, Helene; Schmidt, Ralf; Yue, Shi-Yi; Walpole, Chris; Payza, Kemal; St-Onge, Stephane; Labarre, Maryse; Godbout, Claude; Jakob, Andrea; Butterworth, Joanne; Kamassah, Augustus; Morin, Pierre-Emanuel; Projean, Denis; Ducharme, Julie; Roberts, Edward (Departments of Chemistry and Pharmacology, Astra Zeneca R&D Montreal, Saint-Laurent, QC, H4S 1Z9, Can.). Journal of Medicinal Chemistry, 43(21), 3995-3905 (English) 2000. CODEN: JMCMAR. ISSN: 0022-2623. Publisher: American Chemical Society.
- AB The design, synthesis, and pharmacol. evaluation of a novel class of δ opioid receptor agonists, N,N-diethyl-4-(phenylpiperidin-4-ylidenemethyl)benzamide (I) and its analogs, are described. These comds., formally derived from SNC-80 by replacing the piperazine ring with a piperidine ring containing an exocyclic carbon carbon double bond, were found to bind with high affinity and exhibit excellent selectivity for the δ opioid receptor as full agonists. I, the simplest structure in the class, exhibited an $IC_{50} = 0.87$ nM for the δ opioid receptors and extremely high selectivity over the μ receptors ($\mu/\delta = 4370$) and the κ receptors ($\kappa/\delta = 8590$). Rat liver microsome studies on a selected number of comds. show these olefinic piperidine comds. to be considerably more stable than SNC-80. This novel series of comds. appear to interact with δ opioid receptors in a similar way to SNC-80 since they demonstrate similar SAR. Two general approaches have been established for the synthesis of these comds., based on dehydration of benzhydryl alcs. and Suzuki coupling reactions of vinyl bromide.
- IT 209808-01-5P 307992-18-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RAC (Reactant or reagent)
 (preparation of N,N-diethyl-4-(phenylpiperidin-4-ylidenemethyl)benzamide and its analogs as selective δ -opioid receptor agonists)
- RN 209606-01-5 CAPLUS
 CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)- (CA INDEX NAME)

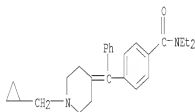


- RN 307992-18-3 CAPLUS
 CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)-, hydrochloride (10:21) (CA INDEX NAME)

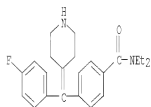


● 21/10 HCL

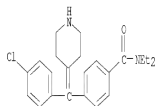
- IT 209807-36-3P 209807-40-9P 209807-41-0P
 209807-42-1P 209807-44-3P 209807-45-4P
 209807-46-5P 209807-49-6P 209807-51-2P
 209807-53-4P 209807-56-7P 209807-60-3P
 209807-63-6P 209807-66-1P 209807-69-2P
 209807-71-6P 209807-72-7P 209807-75-0P
 209807-80-7P 209808-36-6P 307992-19-4P
 307992-20-7P 307992-22-9P 307992-23-0P
 307992-24-1P 307992-25-2P 307992-26-3P
 307992-27-4P 307992-28-5P 307992-29-6P
 307992-31-0P 307992-32-1P 307992-33-2P
 307992-34-3P 307992-35-4P 307992-36-5P
 307992-37-6P 307992-38-7P 307992-39-8P
 307992-40-1P 307992-41-2P 307992-42-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of N,N-diethyl-4-(phenylpiperidin-4-ylidenemethyl)benzamide and its analogs as selective δ -opioid receptor agonists)
- RN 209807-36-3 CAPLUS
 CN Benzamide, 4-[[1-(cyclopropylmethyl)-4-piperidinylidenemethyl]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



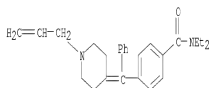
RN 209807-40-9 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209807-41-0 CAPLUS
CN Benzamide, 4-[(4-chlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

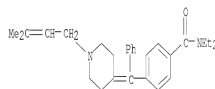


RN 209807-42-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[(phenyl(1-(2-propenyl)-4-piperidinylidene)methyl]- (9CI) (CA INDEX NAME)

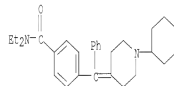


RN 209807-44-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[(1-(3-methyl-2-butenyl)-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

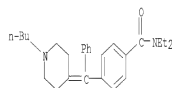
piperidinylidene)phenylmethyl]- (9CI) (CA INDEX NAME)



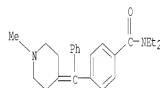
RN 209807-45-4 CAPLUS
CN Benzamide, 4-[(1-cyclohexyl-4-piperidinylidenemethyl)-N,N-diethyl- (CA INDEX NAME)



RN 209807-46-5 CAPLUS
CN Benzamide, 4-[(1-butyl-4-piperidinylidenemethyl)-N,N-diethyl- (CA INDEX NAME)



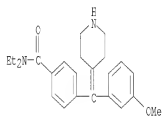
RN 209807-49-8 CAPLUS
CN Benzamide, N,N-diethyl-4-[(1-methyl-4-piperidinylidenemethyl)-N,N-diethyl- (CA INDEX NAME)



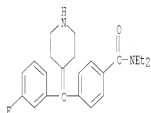
RN 209807-51-2 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

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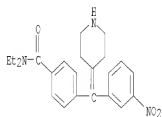
(CA INDEX NAME)



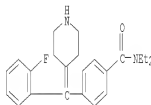
RN 209807-53-4 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209807-56-7 CAPLUS
CN Benzamide, N,N-diethyl-4-[(3-nitrophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



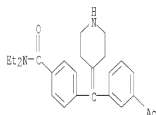
RN 209807-60-3 CAPLUS
CN Benzamide, N,N-diethyl-4-[(2-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



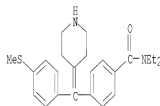
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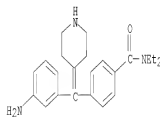
RN 209807-63-6 CAPLUS
CN Benzamide, 4-[(3-acetylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 209807-68-1 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-(methylthio)phenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

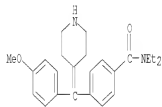


RN 209807-69-2 CAPLUS
CN Benzamide, 4-[(3-aminophenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

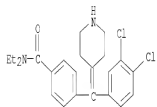


RN 209807-71-6 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-methoxyphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

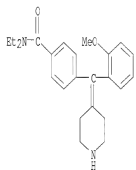
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RN 209807-72-7 CAPLUS
CN Benzanide, 4-[(5,4-dichlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-
(CA INDEX NAME)

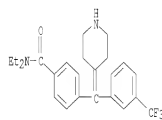


RN 209807-75-0 CAPLUS
CN Benzanide, N,N-diethyl-4-[(2-methoxyphenyl)-4-piperidinylidenemethyl]-
(CA INDEX NAME)

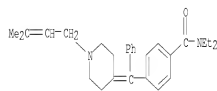


RN 209807-80-7 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-piperidinylidene)-3-(trifluoromethyl)phenyl)methyl]- (CA INDEX NAME)

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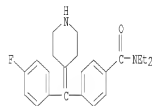


RN 209808-36-6 CAPLUS
CN Benzanide, N,N-diethyl-4-[[1-(3-methyl-2-butenyl)-4-piperidinylidene]phenylmethyl]-, hydrochloride (5:9) (9CI) (CA INDEX NAME)



● 9/5 HCl

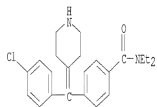
RN 307992-19-4 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-fluorophenyl)-4-piperidinylidenemethyl]-, hydrochloride (2:3) (CA INDEX NAME)



● 3/2 HCl

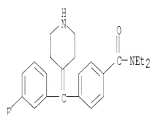
RN 307992-20-7 CAPLUS
CN Benzanide, 4-[(4-chlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, hydrochloride (3:8) (CA INDEX NAME)

Print selected from 10541656.trn



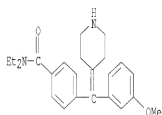
●8/5 HCl

RN 307992-22-9 CAELUS
CN Benzanide, N,N-diethyl-4-[(3-fluorophenyl)-4-piperidinylidenemethyl]-, hydrochloride (5:11) (CA INDEX NAME)



●11/5 HCl

RN 307992-23-0 CAELUS
CN Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylidenemethyl]-, hydrochloride (5:9) (CA INDEX NAME)



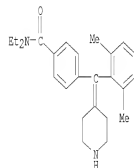
●9/5 HCl

RN 307992-24-1 CAELUS
CN Benzanide, 4-[(2,6-dimethylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, hydrochloride (2:3) (CA INDEX NAME)

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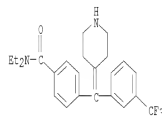
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hydrochloride (5:11) (CA INDEX NAME)



●11/5 HCl

RN 307992-25-2 CAELUS
CN Benzanide, N,N-diethyl-4-[4-piperidinylidene-3-(trifluoromethyl)phenyl]methyl]-, hydrochloride (10:13) (CA INDEX NAME)

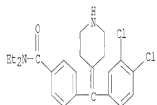


●13/10 HCl

RN 307992-26-3 CAELUS
CN Benzanide, 4-[(3,4-dichlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, hydrochloride (2:3) (CA INDEX NAME)

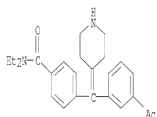
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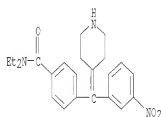
●3/2 HCl

RN 307992-27-4 CASUS
CN Benzanide, 4-[(3-acetylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, hydrochloride (5:9) (CA INDEX NAME)



●9/5 HCl

RN 307992-28-5 CASUS
CN Benzanide, N,N-diethyl-4-[(3-nitrophenyl)-4-piperidinylidenemethyl]-, hydrochloride (5:7) (CA INDEX NAME)



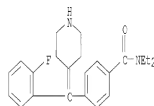
●7/5 HCl

RN 307992-29-6 CASUS
CN Benzanide, N,N-diethyl-4-[(2-fluorophenyl)-4-piperidinylidenemethyl]-, hydrochloride (5:6) (CA INDEX NAME)

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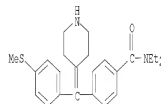
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hydrochloride (2:3) (CA INDEX NAME)



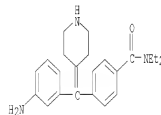
●9/2 HCl

RN 307992-31-0 CASUS
CN Benzanide, N,N-diethyl-4-[(4-methylthio)phenyl]-4-piperidinylidenemethyl-, hydrochloride (2:5) (CA INDEX NAME)



●5/2 HCl

RN 307992-32-1 CASUS
CN Benzanide, 4-[(3-aminophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, hydrochloride (5:6) (CA INDEX NAME)

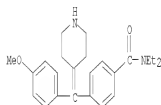


●6/5 HCl

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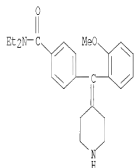
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RN 307992-33-2 CASUS
CN Benzamide, N,N-diethyl-4-[(4-methoxyphenyl)-4-piperidinylidenemethyl]-,
dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

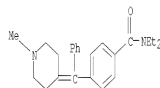
RN 307992-34-3 CASUS
CN Benzamide, N,N-diethyl-4-[(2-methoxyphenyl)-4-piperidinylidenemethyl]-,
hydrochloride (2:3) (CA INDEX NAME)



● 3/2 HCl

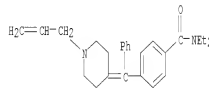
RN 307992-35-4 CASUS
CN Benzamide, N,N-diethyl-4-[(1-methyl-4-piperidinylidene)phenylmethyl]-,
hydrochloride (5:16) (CA INDEX NAME)

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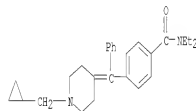
● 16/5 HCl

RN 307992-36-5 CASUS
CN Benzamide, N,N-diethyl-4-[phenyl[1-(2-propenyl)-4-piperidinylidene]methyl]-,
hydrochloride (5:8) (9CI) (CA INDEX NAME)



● 8/5 HCl

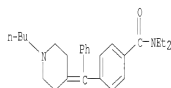
RN 307992-37-6 CASUS
CN Benzamide, 4-[[1-(cyclopropylmethyl)-4-piperidinylidene]phenylmethyl]-N,N-
diethyl-, hydrochloride (10:23) (CA INDEX NAME)



● 23/10 HCl

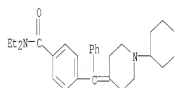
RN 307992-38-7 CASUS
CN Benzamide, 4-[(1-butyl-4-piperidinylidene)phenylmethyl]-N,N-diethyl-,
hydrochloride (10:19) (CA INDEX NAME)

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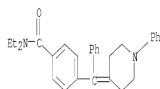
●19/10 HCl

RN 307992-39-8 CAPLUS
CN Benzanide, 4-[(1-cyclohexyl-4-piperidinylidene)phenylmethyl]-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

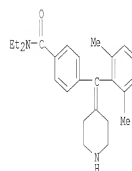
RN 307992-40-1 CAPLUS
CN Benzanide, N,N-diethyl-4-[phenyl(1-phenyl-4-piperidinylidene)methyl]-, hydrochloride (10:17) (CA INDEX NAME)



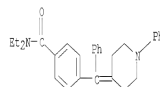
●17/10 HCl

RN 307992-41-2 CAPLUS
CN Benzanide, 4-[(2,6-dimethylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, (CA INDEX NAME)

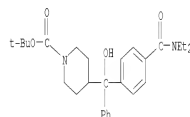
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RN 307992-42-3 CAPLUS
CN Benzanide, N,N-diethyl-4-[phenyl(1-phenyl-4-piperidinylidene)methyl]-, (CA INDEX NAME)

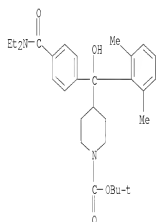


IT 193217-40-2P 209808-00-4P 209808-07-1P
209808-08-2P 209808-10-6P 209808-11-7P
209808-19-5P
RL: RCT (Reactant); SPW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N,N-diethyl-4-(phenylpiperidin-4-ylidenemethyl)benzanide and its analogs as selective δ -opioid receptor agonists)
RN 193217-40-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

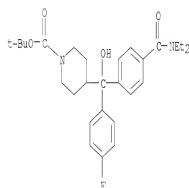


RN 209808-00-4 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl](2,6-dimethylphenyl)hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

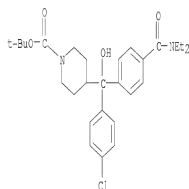
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RN 209808-07-1 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][4-fluorophenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



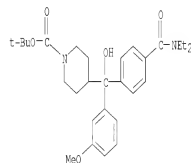
RN 209808-08-2 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][4-chlorophenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



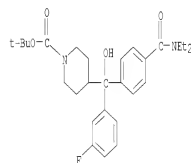
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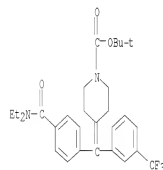
RN 209808-10-6 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]hydroxy[3-methoxyphenyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 209808-11-7 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-fluorophenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 209808-13-5 CAFLUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-(trifluoromethyl)phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



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L11 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2008 ACS ON STN

2000:653165 Document No. 134:4912 New Diarylmethylpiperazines as Potent and Selective Nonpeptidic δ Opioid Receptor Agonists with Increased In Vitro Metabolic Stability. Plebeck, Niklas; Delorme, Daniel; Wei, Zhong-Tong; Tang, Shu; Zhou, Pei; Schwarz, Peter; Gawell, Lars; Gagnon, Helene; Pelcman, Benjamin; Schmidt, Ralf; Yue, Shi Yi; Walpole, Christopher; Brown, William; Zhou, Edward; Labarre, Maryse; Payza, Kemal; St-Onge, Stephane; Kanassah, Augustus; Morin, Pierre-Emmanuel; Projean, Denis; Ducharme, Julie; Roberts, Edward (Departments of Chemistry and Pharmacology, Astra Zeneca R&D Montreal, Saint-Laurent, QC, H4S 1A3, Can.). Journal of Medicinal Chemistry, 43(21), 3878-3894 (English) 2000. CODEN: JMCMAH. ISSN: 0022-2625. OTHER SOURCES: CASREACT 134:4912. Publisher: American Chemical Society.

AB Nonpeptide δ opioid agonists are analgesics with a potentially improved side-effect and abuse liability profile, compared to classical opioids. Andrews anal. of the NIH nonpeptide lead SNC-80 suggested the removal of substituents not predicted to contribute to binding. This approach led to a simplified lead, N,N-diethyl-4-(phenyl(1-piperazinyl)methyl)benzamide which retained potent binding affinity and selectivity to the human δ receptor (IC50 = 11 nM, μ/δ = 740, κ/δ > 900) and potency as a full agonist (EC50 = 36 nM) but had a markedly reduced mol. weight, only one chiral center, and increased in vitro metabolic stability. From this lead, the key pharmacophore groups for δ receptor affinity and activation were more clearly defined by SAR and mutagenesis studies. Further structural modifications confirmed the importance of the N,N-diethylbenzamide group and the piperazine lower basic nitrogen for δ binding, in agreement with mutagenesis data. A number of piperazine N-alkyl substituents were tolerated. In contrast, modifications of the Ph group led to the discovery of a series of diarylmethylpiperazines exemplified by N,N-diethyl-4-[(1-piperazinyl(8-quinolinyl)methyl)benzamide which had an improved in vitro binding profile (IC50 = 0.5 nM, μ/δ = 1239, EC50 = 3.6 nM) and increased in vitro metabolic stability compared to SNC-80.

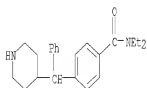
IT 193217-04-0P 308110-60-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(diarylmethylpiperazines as potent and selective nonpeptidic δ opioid receptor agonists with increased in vitro metabolic stability)

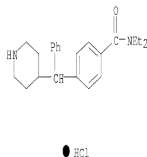
RN 193217-04-0 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylmethyl)- (CA INDEX NAME)



RN 308110-60-3 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

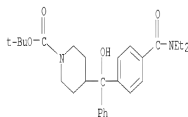


IT 193217-40-2P

RL: RCT (Reactant); SEN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(diarylmethylpiperazines as potent and selective nonpeptidic δ opioid receptor agonists with increased in vitro metabolic stability)

RN 193217-40-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[[diethylamino]carbonyl]phenyl]hydroxyphenylmethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



L11 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2008 ACS ON STN

2000:53(500) Document No. 133:261039 Synthesis and evaluation of 4-(N,N-diarylamino)piperidines with high selectivity to the δ -opioid receptor: a combined 3D-QSAR and ligand docking study. Podlogar, Brent L.; Foca, Gennady I.; Deneser, David A.; Zhang, Sui-Fo; Carson, John R.; Neilson, Lou Anne; Reitz, Allen B.; Ferguson, David M. (Department of Chemistry, Bayer Research Center, West Haven, CT, 06516, USA). Drug Design and Discovery, 17(1), 34-50 (English) 2000. CODEN: DDDIEN. ISSN: 1055-9612. Publisher: Harwood Academic Publishers.

AB A series of 4-(N,N-diarylamino)piperidines are synthesized and evaluated for high affinity binding and selectivity to the δ -opioid receptor using a combination of 3D-QSAR and mol. docking techniques. Based on expl. ligand binding data to both μ - and δ -opioid receptors, CoMFA fields are generated and applied to identify potential ligand modifications to further optimize lead compds. Mol. docking expts. to the δ -receptor are also reported that explain the CoMFA trends predicted as well as the differential binding and selectivity displayed by various

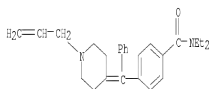
compds. in the series. An anal. of the binding site model proposed indicates the piperidines take advantage of 3 key sites or binding domains within the δ -receptor. These include an aromatic pocket (approx. 1/3 into the receptor cavity), an aspartic acid residue (which serves as a docking point for the piperidinyll cationic amine) and a hydrophobic pocket at the extracellular boundary of the receptor cavity. Links are established between ligand modification and amino acid composition at these sites in μ and δ , providing new insight to the structural basis to binding and selectivity across the series and for related piperazines (i.e. SNC80 and BW373U86). Results are also presented that indicate δ - and μ -selectivity may be determined at alternate sites, suggesting opioid receptors may display multiple binding domains. The model is further supported by comparisons with opiate binding modes and site directed mutagenesis studies and is finally applied to suggest new strategies in ligand design.

II 209807-42-1 297750-41-5

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); B10L (Biological study); PROC (Process)
(synthesis and evaluation of (diarylamino)piperidines with high selectivity to δ -opioid receptor over μ -opioid receptor using combined 3D-QSAR and ligand docking study)

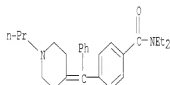
RN 209807-42-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[1-(2-propenyl)-4-piperidinylidene]methyl]- (9CI) (CA INDEX NAME)



RN 297750-41-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[1-propyl-4-piperidinylidene]methyl]- (CA INDEX NAME)



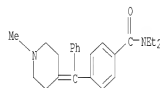
II 209807-49-8P 297750-73-3P

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); B10L (Biological study); PRP (Preparation); PROC (Process)

(synthesis and evaluation of (diarylamino)piperidines with high selectivity to δ -opioid receptor over μ -opioid receptor using combined 3D-QSAR and ligand docking study)

RN 209807-49-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(1-methyl-4-piperidinylidene)phenylmethyl]- (CA INDEX NAME)



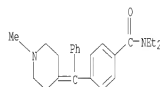
RN 297750-73-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(1-methyl-4-piperidinylidene)phenylmethyl]-, (2E)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRM 209807-49-8

CME C24 H30 N2 O



CM 2

CRM 110-17-8

CME C4 H4 O4

Double bond geometry as shown.



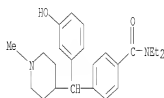
II 297750-69-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PRP (Preparation); RACT (Reactant or reagent)

(synthesis and evaluation of (diarylamino)piperidines with high selectivity to δ -opioid receptor over μ -opioid receptor using combined 3D-QSAR and ligand docking study)

RN 297750-69-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(1-methyl-4-piperidinyl)methyl]- (CA INDEX NAME)



IT 297750-70-0P

RU: SPW (Synthetic preparation); PREP (Preparation)
 (synthesis and evaluation of (diarylamino)piperidines with high
 selectivity to δ -opioid receptor over μ -opioid receptor using
 combined 3D-QSAR and ligand docking study)

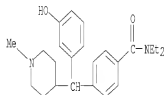
RN 297750-70-0 CAPLUS

CM Benzamide, N,N-diethyl-4-[(3-hydroxyphenyl)(1-methyl-4-piperidinyl)methyl]-
 , (2S)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRM 297750-69-7

CMF C24 H32 N2 O2



CM 2

CRM 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.

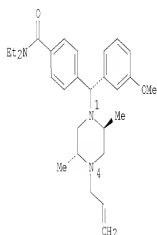


111 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2008 ACS on SIN

1999:780596 Document No. 132:137355 Probes for Narcotic Receptor Mediated
 Phenomena. 26.Synthesis and Biological Evaluation of
 Diarylmethylpiperazines and Diarylmethylpiperidines as Novel, Nonpeptidic
 δ Opioid Receptor Ligands. Zhang, Xiaoyan; Rise, Kenner C.;
 Calderon, Silvia N.; Kayakiri, Hiroshi; Smith, Darren; Coop, Andrew;
 Jacobson, Arthur E.; Rothman, Richard B.; Davis, Peg; Dersch, Christina
 M.; Porreca, Frank (Laboratory of Medicinal Chemistry, National Institute

of Diabetes and Digestive and Kidney Diseases National Institutes of
 Health, Bethesda, MD, 20892, USA). Journal of Medicinal Chemistry,
 42(26), 5455-5463 (English) 1999. CODEN: JMCMMR. ISSN: 0022-2623.
 Publisher: American Chemical Society.

GI



I

AB We recently reported (+)-4-[(α R)-o-[(2S,5R)-4-allyl-2,5-
 dimethyl-1-piperazinyl]-3-methoxybenzyl]-N,N-diethylbenzamide (1b, SMC80,
 I) as a novel nonpeptidic δ receptor agonist and explored the
 structure-activity relationships (SAR) of a series of related derivate. We
 have found that δ binding activities and selectivity showed little
 change when the 3-methoxy group in 1b was removed or replaced by the other
 substituents, whereas the N,N-diethylbenzamide group is important for
 interaction with the δ receptor. Extensive modification of the
 piperazine nucleus led to the synthesis of a new series of
 N,N-diethyl(α -piperazinylbenzyl)benzamides, N,N-diethyl(α -
 piperidinyl or piperidinylidenebenzyl)benzamides, and related derivate.
 Several compounds strongly bound to the δ receptor with Ki values in
 the low nanomolar range. On the other hand, the binding affinities of
 these compounds for the μ and κ receptors were negligible,
 indicating excellent δ opioid receptor subtype selectivity. The two
 nitrogen atoms on the piperazine nucleus showed different SAR in the
 interaction of this series of compounds at the δ receptor. Nitrogen
 N4 appears to be an important structural element and is essential for
 electrostatic interaction, while N1 seems to be unnecessary for
 recognition at the δ receptor.

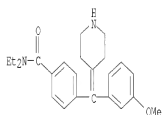
IT 209807-SI-ZP 209807-52-ZP 256504-46-0P

RU: RMC (Biological activity or effector, except adverse); BSV (Biological
 study, unclassified); RCT (Reactant); SPK (Synthetic preparation); BVL
 (Biological study); PREP (Preparation); RAC (Reactant or reagent)
 (synthesis and bio. evaluation of (diarylmethyl)piperazines and
 (diarylmethyl)piperidines as nonpeptidic δ opioid receptor
 ligands)

RN 209807-SI-2 CAPLUS

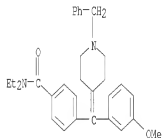
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CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinidenemethyl]-
(CA INDEX NAME)



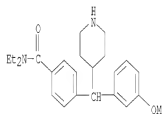
RN 209807-52-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 256504-46-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylmethyl]- (CA INDEX NAME)



IT 209808-42-4P 209809-43-5P 256504-47-9P
256504-48-1P 256504-57-1P 256504-58-2P
256504-59-3P

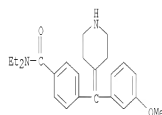
RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PSEP (Preparation)
(synthesis and biol. evaluation of diarylmethylpiperazines and (diarylmethyl)piperidines as nonpeptidic δ opioid receptor ligands)

RN 209808-42-4 CAPLUS

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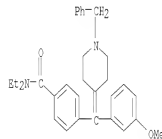
CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylidenemethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-43-5 CAPLUS

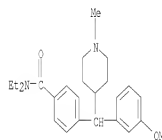
CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 256504-47-9 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)(1-methyl-4-piperidinyl)methyl]- (CA INDEX NAME)

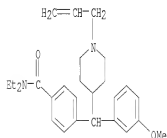


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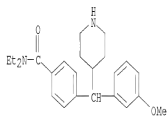
RN 256504-48-0 CAPLUS

CH Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(2-propenyl)-4-piperidinylmethyl]- (9CI) (CA INDEX NAME)



RN 256504-57-1 CAPLUS

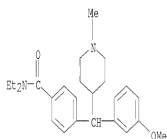
CH Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 256504-58-2 CAPLUS

CH Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)(1-methyl-4-piperidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



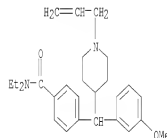
● HCl

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RN 256504-59-3 CAPLUS

CH Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(2-propenyl)-4-piperidinylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

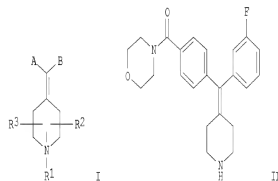


● HCl

L11 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2008 ACS on STM

1998:479508 Document No. 129:95406 Preparation of 4-(diaryl- or (aryl)heteroaryl)methylene]piperidine derivatives with analgesic effect. Delorme, Daniel; Roberts, Edward; Wei, Zhongyong (Astra Pharma Inc., Can.; Astra Aktiebolag (Publ)). PCT Int. Appl. WO 9828275 A1 19980702, 129 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GE, GR, GH, GU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LW, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VU, YU, ZW, AM, AL, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXX02. APPLICATION: WO 1997-52050 19971209. PRIORITY: SE 1996-4785 19961220; SE 1997-2535 19970701.

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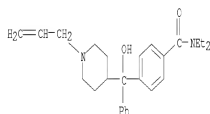
AB Comps. of general formula [I; R1 = H, linear or branched C1-6 alkyl, C1-6 alkenyl, C3-8 cycloalkyl, C3-6 cycloalkyl-C1-2 alkyl, C6-10 aryl, heteroaryl having 5 to 10 atoms selected from C, S, N, and O, C1-2 alkyl-(un)substituted C6-10 aryl, C1-2 alkyl-(un)substituted heteroaryl having 5 to 10 atoms selected from C, S, N, and O; R2, R3 = H, C1-6 alkyl; A = N and/or benzene-ring 4-carbamoylphenyl, 4-sulfamoylphenyl, acylaminophenyl, or acylphenyl wherein N and/or benzene-ring are optionally substituted; S = (un)substituted aromatic, heteroarom., hydroarom., or heterohydroarom. moieties having 5 to 10 atoms selected from C, S, N, and O atoms] are disclosed and claimed in the present application, as well as their pharmaceutically acceptable salts, pharmaceutical comps. comprising the novel comps., their use in therapy, in particular in the management of pain and in the treatment of gastrointestinal disorders, spinal injuries, disorders of the sympathetic nervous system, and isotopically labeled I as diagnostic agents. The comps. are ligands for opioid receptor, have analgesic effect, and are useful for the treatment of various pain conditions such as chronic pain, acute pain, cancer pain, pain caused by rheumatoid arthritis, migraine, visceral pain, etc. (no data). Thus, tert-Bu 4-[bromo[4-(morpholinocarbonyl)phenyl]methylene]-1-piperidinecarboxylate (preparation given) was coupled with 3-fluorophenylboronic acid in the presence of (PPh3)4Pd and Na2CO3 in aqueous EtOH at 80° for 2 h under N followed by treatment with CF3COOH and acidification with aqueous HCl to give the title compound (II.HCl).

II 209808-28-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of [diaryl- or (aryl)heteroaryl]methylene]piperidine derivs. with analgesic effect)

RN 209808-28-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[hydroxyphenyl[1-(2-propenyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



II 209808-00-4P 209808-01-5P 209808-03-7P

209808-07-1P 209808-08-2P 209808-10-6P

209808-11-7P 209808-19-5P 209808-20-8P

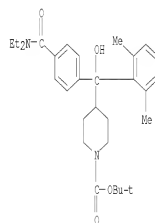
209808-30-0P 209808-47-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of [diaryl- or (aryl)heteroaryl]methylene]piperidine derivs. with analgesic effect)

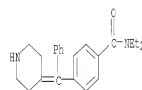
RN 209808-00-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][2,6-dimethylphenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



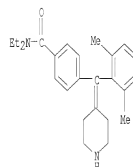
RN 209808-01-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[(phenyl-4-piperidinylidenemethyl)- (CA INDEX NAME)



RN 209808-03-7 CAPLUS

CN Benzamide, 4-[[2,6-dimethylphenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



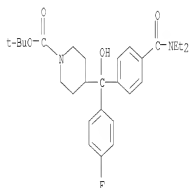
● HCl

RN 209808-07-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][4-

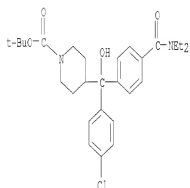
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fluorophenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



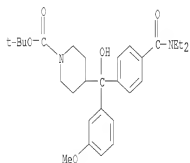
RN 209808-08-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(4-chlorophenyl)[4-[(diethylamino)carbonyl]phenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 209808-10-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]hydroxy(3-methoxyphenyl)methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

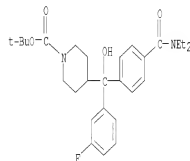


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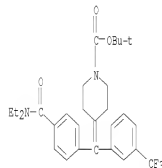
RN 209808-11-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-fluorophenyl]hydroxymethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



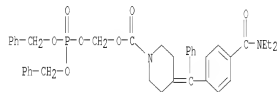
RN 209808-19-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-(trifluoromethyl)phenyl]methylene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 209808-20-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]phenylmethylene]-, [[bis(phenylmethoxy)phosphinyl]oxymethyl] ester (CA INDEX NAME)



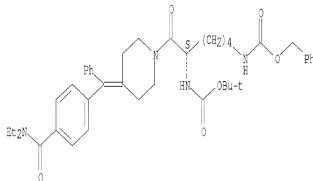
RN 209808-30-0 CAPLUS

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Print selected from 10541656.trn

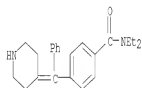
CN Carbamic acid, [(1S)-1-[[4-[[4-[(diethylamino)carbonyl]phenyl]phenylmethyl]ene]-1-piperidinyl]carbonyl]-5-[[[phenylmethoxy]carbonyl]amino]pentyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 209808-47-9 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylidenemethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 209807-35-2P 209807-36-3P 209807-37-4P
209807-40-9P 209807-41-0P 209807-42-1P
209807-43-2P 209807-44-3P 209807-45-4P
209807-46-5P 209807-47-6P 209807-48-7P
209807-49-8P 209807-51-2P 209807-52-3P
209807-53-4P 209807-55-6P 209807-56-7P
209807-57-8P 209807-58-9P 209807-59-0P
209807-60-3P 209807-61-4P 209807-62-5P
209807-63-4P 209807-64-7P 209807-66-1P
209807-69-2P 209807-70-5P 209807-71-6P
209807-72-7P 209807-73-8P 209807-74-9P
209807-75-0P 209807-76-1P 209807-78-3P
209807-79-4P 209807-80-7P 209807-81-8P
209807-82-9P 209807-83-0P 209807-84-1P
209807-85-2P 209808-27-5P 209808-29-7P
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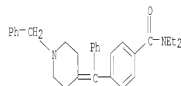
209808-39-9P 209808-40-2P 209808-42-4P

209808-43-5P 209808-44-6P 209808-46-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOU (Biological study); PSEP (Preparation); USSS (Uses)
(preparation of [diaryl- or arylheteroaryl]methylene]piperidine derivs. with analgesic effect)

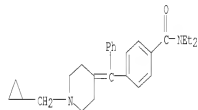
RN 209807-35-2 CAPLUS

CN Benzamide, N,N-diethyl-4-[phenyl[1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



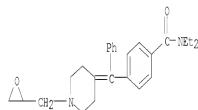
RN 209807-36-3 CAPLUS

CN Benzamide, 4-[[1-(cyclopropylmethyl)-4-piperidinylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



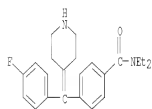
RN 209807-37-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[1-(oxiranylmethyl)-4-piperidinylidene]phenylmethyl]- (9CI) (CA INDEX NAME)

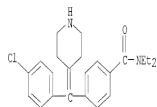


RN 209807-40-9 CAPLUS

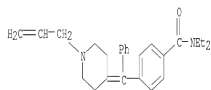
CN Benzamide, N,N-diethyl-4-[(4-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



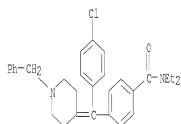
RN 209807-41-0 CAPLUS
CN Benzanide, 4-[(4-chlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 209807-42-1 CAPLUS
CN Benzanide, N,N-diethyl-4-[phenyl]-4-piperidinylidenemethyl- (9CI) (CA INDEX NAME)

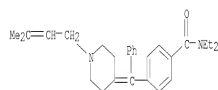


RN 209807-43-2 CAPLUS
CN Benzanide, 4-[(4-chlorophenyl)-1-(phenylmethyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

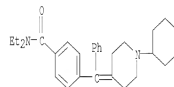


RN 209807-44-3 CAPLUS

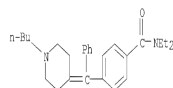
CN Benzanide, N,N-diethyl-4-[1-(3-methyl-2-butenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)



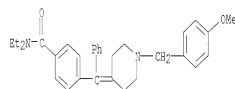
RN 209807-45-4 CAPLUS
CN Benzanide, 4-[1-(cyclohexyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 209807-46-5 CAPLUS
CN Benzanide, 4-[1-butyl-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



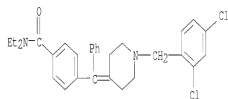
RN 209807-47-6 CAPLUS
CN Benzanide, N,N-diethyl-4-[1-[(4-methoxyphenyl)methyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



RN 209807-48-7 CAPLUS

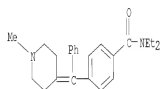
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CN Benzamide, 4-[[1-[(2,4-dichlorophenyl)methyl]-4-piperidinylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)



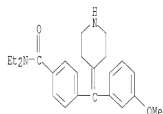
RN 209807-49-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(1-methyl-4-piperidinylidene)phenylmethyl]- (CA INDEX NAME)



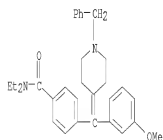
RN 209807-51-2 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209807-52-3 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(phenylmethyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

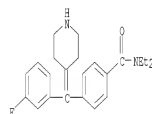


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Print selected from 10541656.trn

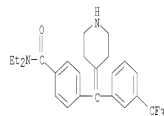
RN 209807-53-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209807-55-6 CAPLUS

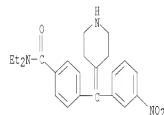
CN Benzamide, N,N-diethyl-4-[(4-piperidinylidene[3-(trifluoromethyl)phenyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209807-56-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-nitrophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

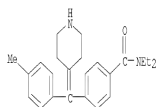


RN 209807-57-9 CAPLUS

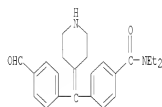
CN Benzamide, N,N-diethyl-4-[(4-methylphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

Page 508

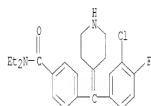
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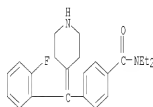
RN 209807-58-9 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-formylphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



RN 209807-59-0 CAPLUS
CN Benzanide, 4-[(3-chloro-4-fluorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)



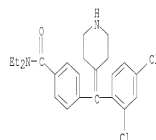
RN 209807-60-3 CAPLUS
CN Benzanide, N,N-diethyl-4-[(2-fluorophenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)



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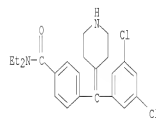
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RN 209807-61-4 CAPLUS
CN Benzanide, 4-[(2,4-dichlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



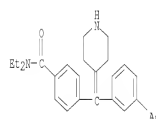
● HCl

RN 209807-62-5 CAPLUS
CN Benzanide, 4-[(3,5-dichlorophenyl)-4-piperidinylidenemethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209807-63-6 CAPLUS
CN Benzanide, 4-[(3-acetylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl- (CA INDEX NAME)

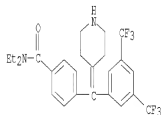


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Print selected from 10541656.trn

RN 209807-64-7 CAPLUS

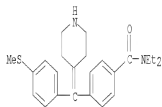
CN Benzamide, 4-[[3,5-bis(trifluoromethyl)phenyl]-4-piperidinylidenemethyl]-
N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

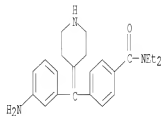
RN 209807-68-1 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-(methylthio)phenyl]-4-piperidinylidenemethyl]-
(CA INDEX NAME)



RN 209807-69-2 CAPLUS

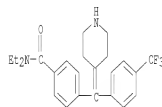
CN Benzamide, 4-[[3-aminophenyl]-4-piperidinylidenemethyl]-N,N-diethyl- (CA
INDEX NAME)



RN 209807-70-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-piperidinylidene[4-(
(trifluoromethyl)phenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

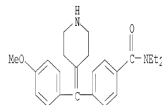
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● HCl

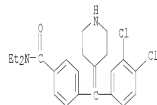
RN 209807-71-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-methoxyphenyl]-4-piperidinylidenemethyl]-
(CA INDEX NAME)



RN 209807-72-7 CAPLUS

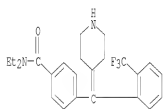
CN Benzamide, 4-[[3,4-dichlorophenyl]-4-piperidinylidenemethyl]-N,N-diethyl-
(CA INDEX NAME)



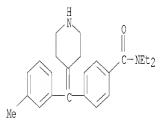
RN 209807-73-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[4-piperidinylidene[2-(
(trifluoromethyl)phenyl)methyl]- (CA INDEX NAME)

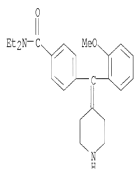
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RN 209807-74-9 CAPLUS
CN Benzanide, N,N-diethyl-4-[(3-methylphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

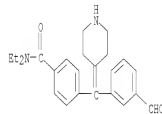


RN 209807-75-0 CAPLUS
CN Benzanide, N,N-diethyl-4-[(2-methoxyphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

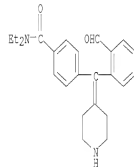


RN 209807-76-1 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-acetylphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

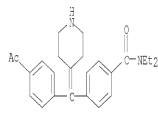
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RN 209807-78-3 CAPLUS
CN Benzanide, N,N-diethyl-4-[(2-formylphenyl)-4-piperidinylidenemethyl]- (CA INDEX NAME)

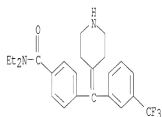


RN 209807-79-4 CAPLUS
CN Benzanide, 4-[[4-(4-acetylphenyl)-4-piperidinylidenemethyl]-N,N-diethyl]- (CA INDEX NAME)



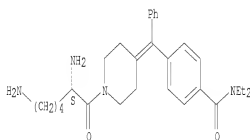
RN 209807-80-7 CAPLUS
CN Benzanide, N,N-diethyl-4-[(4-piperidinylidene[3-(trifluoromethyl)phenyl]methyl)- (CA INDEX NAME)

Print selected from 10541656.trn

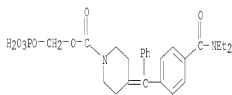


RN 209807-81-9 CAMELUS
CN Benzaride, 4-[[1-[(2S)-2,6-diamino-1-oxohexyl]-4-piperidinylidene]phenylmethyl]-N,N-diethyl- (CA INDEX NAME)

Absolute stereochemistry.



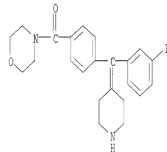
RN 209807-82-9 CAMELUS
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]phenylmethyl]-, (phosphonoxy)methyl ester, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

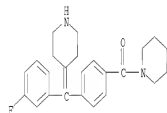
RN 209807-83-0 CAMELUS
CN Morpholine, 4-[[4-[(3-fluorophenyl)-4-piperidinylidenemethyl]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Print selected from 10541656.trn

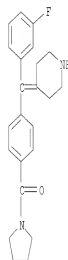


● HCl

RN 209807-84-1 CAMELUS
CN Piperidine, 1-[[4-[(3-fluorophenyl)-4-piperidinylidenemethyl]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)



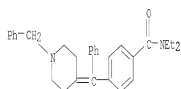
RN 209807-85-2 CAMELUS
CN Pyrrolidine, 1-[[4-[(3-fluorophenyl)-4-piperidinylidenemethyl]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)



Print selected from 10541656.trn

RN 209808-27-5 CASUS

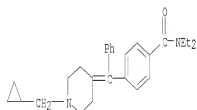
CN Benzanide, N,N-diethyl-4-[phenyl[1-(phenylmethyl)-4-piperidinylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-29-7 CASUS

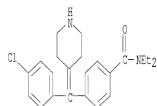
CN Benzanide, 4-[[1-(cyclopropylmethyl)-4-piperidinylidene]phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-33-3 CASUS

CN Benzanide, 4-[[4-chlorophenyl]-4-piperidinylidenemethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

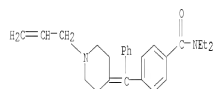


● HCl

Print selected from 10541656.trn

RN 209808-34-4 CASUS

CN Benzanide, N,N-diethyl-4-[phenyl[1-(2-propenyl)-4-piperidinylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

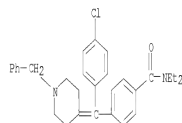
RN 209808-35-5 CASUS

CN Benzanide, 4-[[4-chlorophenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-diethyl-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 209807-43-2

CMF C30 E33 C1 N2 0



CM 2

CRN 87-69-4

CMF C4 E6 06

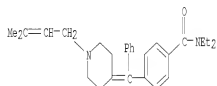
Absolute stereochemistry.



Print selected from 10541636.trn

RN 209808-36-6 CAPLUS

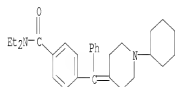
CN Benzamide, N,N-diethyl-4-[[1-(3-methyl-2-butenyl)-4-piperidinylidene]phenylmethyl]-, hydrochloride (5:9) (9CI) (CA INDEX NAME)



● 9/5 HCl

RN 209808-37-7 CAPLUS

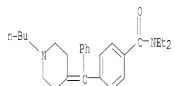
CN Benzamide, 4-[[1-(cyclohexyl-4-piperidinylidene)phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-38-8 CAPLUS

CN Benzamide, 4-[[1-butyl-4-piperidinylidene]phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



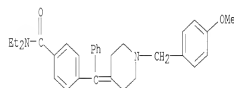
● HCl

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Print selected from 10541636.trn

RN 209808-39-9 CAPLUS

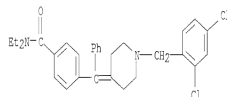
CN Benzamide, N,N-diethyl-4-[[1-[(4-methoxyphenyl)methyl]-4-piperidinylidene]phenylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-40-2 CAPLUS

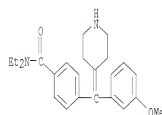
CN Benzamide, 4-[[1-[(2,4-dichlorophenyl)methyl]-4-piperidinylidene]phenylmethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 209808-42-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[(3-methoxyphenyl)-4-piperidinylidene]methyl-, monohydrochloride (9CI) (CA INDEX NAME)



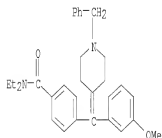
● HCl

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Print selected from 10541636.trn

RN 209808-43-5 CAPLUS

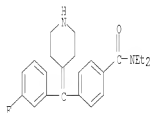
CN Benzanide, N,N-diethyl-4-[(3-methoxyphenyl)[1-(phenylmethyl)-4-piperidinylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● 9CI

RN 209808-44-6 CAPLUS

CN Benzanide, N,N-diethyl-4-[(3-fluorophenyl)-4-piperidinylidene]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



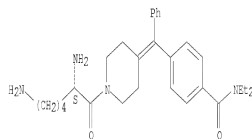
● 9CI

RN 209808-46-8 CAPLUS

CN Benzanide, 4-[[1-[(2S)-2,6-diamino-1-oxohexyl]-4-piperidinylidene]phenylmethyl]-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Print selected from 10541636.trn

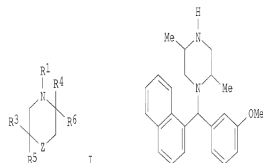


● 2 HCl

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1997:506552 Document No. 127:149159 Preparation of N-diarylmethylpiperazines as analgesics. Roberts, Edward; Plobeck, Niklas; Wahlestedt, Claes (Astra Pharma Inc., Can.; Astra Aktiebolag (Publ); Roberts, Edward; Plobeck, Niklas; Wahlestedt, Claes). PCT Int. Appl. NO 9723466 A1 19970703, 110 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KR, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, EG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXX02. APPLICATION: WO 1996-SE1635 19961211. PRIORITY: SE 1995-4661 19951222.

GI



I

II

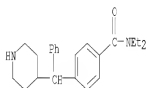
AB Title compds. [I; R1 = H, alkyl, (hetero)aryl, etc.; R3-R6 = groups cited for R1, amino(alkyl), carbamoyl(alkyl), etc.; E = CHC(R)2 or NCR(R)2; R2 = H, Me, OR, CO2R, CH2CO2R; R7 = aminophenyl, acylphenyl, quinolyl, etc.; R8 = (hetero)aryl] were prepared as analgesics (no detail). Thus, 3-(MeO)C6H4C=O was treated with BuLi and the product condensed with 1-naphthaldehyde to give, after chlorination and amination with trans-2,5-dimethylpiperazine, title compound trans-II.

IT 193217-06-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-diarylmethylpiperazines as analgesics)

RN 193217-05-0 CAPLUS

CN Benzamide, N,N-diethyl-4-(phenyl-4-piperidinylmethyl)- (CA INDEX NAME)



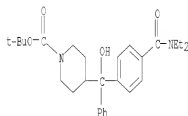
IT 193217-40-2P

RL: RCT (Reactant); SPW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-diarylmethylpiperazines as analgesics)

RN 193217-40-2 CAPLUS

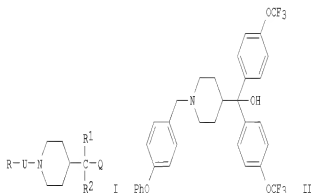
CN 1-Piperidinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl]hydroxyphenylmethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



111 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

1997:411068 Document No. 127:10852 Insecticidal N-(substituted arylmethyl)-4-[bis(substituted phenyl)methyl]piperidines. Silverman, Ian R.; Cohen, Daniel H.; Lyga, John W.; Szczechanski, Steven W.; Ali, Syed F. (PMC Corp., USA). U.S. 5639763 A 19970617, 47 pp., Cont.-in-part of U.S. Ser. No. 204,033, abandoned. (English). CODEN: USXKAM.
APPLICATION: US 1995-389675 19950216. PRIORITY: US 1994-204033 19940301.

GT



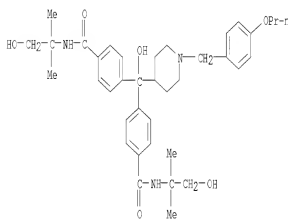
AE Title compds. I and the corresponding N-oxides and agriculturally acceptable salts are disclosed as effective insecticides [in which U = (CH2)n, CHMe, CO, NHCO, etc.; Q = H, OH, SH, F; R = 5- or 6-membered heterocycle with optional benzo fusion, (un)substituted Ph or hetero-fused Ph; R1, R2 = 5- or 6-membered heterocyclyl, (un)substituted Ph; n = 1, 2, or 3; with provisos]. For instance, reductive N-alkylation of Et piperidin-4-ylcarboxylate with 4-PhOC6H4CHO and NaBH3CN, and Grignard reaction of the resultant ester with 4-OCF3OC6H4Br, gave title compound II. At 10-4 M in the diet of the tobacco budworm (*Heliothis virescens*), II gave 100% mortality and 100% growth inhibition.

IT 183993-48-8P 183993-49-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of insecticidal (arylmethyl)bis(phenylmethyl)piperidines)

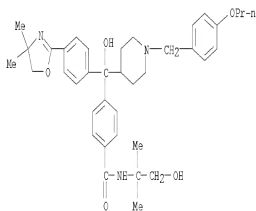
RN 183993-48-8 CAPLUS

CN Benzamide, 4,4'-[hydroxy]1-[(4-propoxyphenyl)methyl]-4-piperidinyl[methylene]bis[N-(2-hydroxy-1,1-dimethylethyl)- (CA INDEX NAME)]



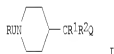
RN 183993-49-9 CAPLUS

CN Benzamide, 4-[[4-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)phenyl]hydroxy[1-[(4-propoxyphenyl)methyl]-4-piperidinyl)methyl]-N-(2-hydroxy-1,1-dimethylethyl)- (CA INDEX NAME)



L11 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN
1996:701933 Document No. 126:3093 Insecticidal N-(substituted arylmethyl)-4-bis(substituted phenyl)methylpiperidines. Silverman, Ian R.; Cohen, Daniel H.; Lyga, John W.; Szczepanski, Steven W.; Ali, Syed F. (FMC Corp., USA). U.S. 5569664 A 19961029, 45 pp., Division of U.S. Ser. No. 389, 675. (English). CODEN: USXNAN. APPLICATION: US 1995-445315 19950519. PRIORITY: US 1995-389675 19950216.

GI

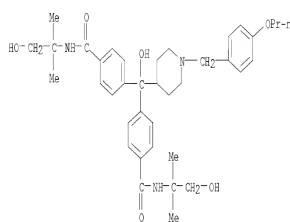


AB Substituted piperidines I [U = HSOCH₃, (CH₂)_n, etc.; Q = H, OH, SH, F; R = heterocyclyl, (substituted) Ph; R1, R2 = Ph substituted with haloalkyl, haloalkoxy, alkoxyalkyl, dialkylaminosulfonyl, hydroxyalkylaminocarbonyl, alkylsulfonyloxy, haloalkylsulfonyloxy; n = 1-3], the corresponding N-oxides, and agriculturally acceptable salts are prepared for use as agricultural insecticides. Thus, 4-trifluoromethoxyphenyl bromide reacted with Mj and St N-(4-methoxyphenyl)methylpiperidine-4-carboxylate to form I (U = CH₂, Q = OH, R = 4-MeOC₆H₄, R1 = R2 = 4-F₃CO₂C₆H₄) (II). II, applied as a foliar spray at 100 ppm to pinto bean plants, gave 100% control of cabbage loopers (*Trichoplusia ni*).

IT 183993-48-9E 183993-49-9E
R1: AG2 (Agricultural use); BAC (Biological activity or effector, except adverse); BEU (Biological study, unclassified); SPW (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (insecticidal bis(substituted phenyl)methylpiperidines)

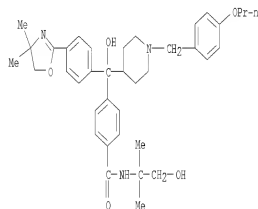
RN 183993-48-9E CAPLUS

CN Benzamide, 4,4'-[hydroxy[1-[(4-propoxyphenyl)methyl]-4-piperidinyl)methylene]bis[N-(2-hydroxy-1,1-dimethylethyl)- (CA INDEX NAME)



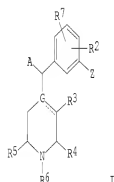
RN 183993-49-9 CAPLUS

CN Benzamide, 4-[[4-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)phenyl]hydroxy[1-[(4-propoxyphenyl)methyl]-4-piperidinyl)methyl]-N-(2-hydroxy-1,1-dimethylethyl)- (CA INDEX NAME)



L11 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN
1994:483367 Document No. 121:85367 Analgesic diarylmethylpiperazines and piperidines. Chang, Rwen Jen; Boswell, Grady Evan; Buback, Dulce Garrido; Collins, Mark Allan; Davis, Ann Octot; Monatt, Robert Walton (Wellcome Foundation Ltd., UK). PCT Int. Appl. No. 93/15062 A1 1993/08/05, 214 pp. DESIGNATED STATES: BW, AT, BE, BF, BJ, CE, CS, CH, CI, CM, DE, DK, ES, FR, GB, GR, HU, IE, IT, JP, KR, NL, NL, PT, SE, SM, TD, TO. (English). CODEN: PEXXO2. APPLICATION: No 1993-GB216 1993/02/02. PRIORITY: GB 1992-2238 1992/02/03.

GI



AB The title compds. [I; A = 5- or 6-membered carbocyclic or heterocyclic aromatic ring; G = C, N; R2 = H, halogen, Cl-4 alkyl; R3-R5 = H, Me (so long as the total number of Me groups is not greater than 2); R6 = H, Cl-6 alkyl, C3-6 cycloalkyl, aralkyl, etc.; R7 = H, F; Z = HO, esters, hydroxymethyl, NH2, carboximides, sulfonylides; R1 = R2 = R7 = F only when Z = OH and G = C when R6 ≠ aralkyl], useful as mu and/or delta receptor opiod compds. for mediating analgesia, are prepared and I-containing formulations presented. Thus, (+)-4-[(a-R)-a-[(2S,5R)-4-allyl-2,5-dimethyl-1-piperazinyl-3-hydroxybenzyl]-N,N-diethylbenzamide, prepared from 3-bromophenol in a multi-step reaction, demonstrated 50% inhibitory

concentration against rat brain delta receptors at 1.8 nM and 50% Mu receptor inhibitory concentration of 15 nM.

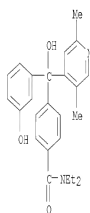
IT 155766-56-6P 155766-57-7P 155766-59-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of analgesics)

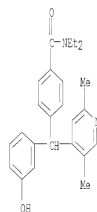
RN 155766-56-6 CAPLUS

CN Benzamide, 4-[(2,5-dimethyl-4-pyridinyl)hydroxy(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



RN 155766-57-7 CAPLUS

CN Benzamide, 4-[(2,5-dimethyl-4-pyridinyl)(3-hydroxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)



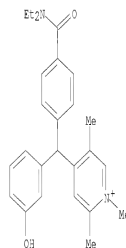
RN 155766-59-9 CAPLUS

CN Pyridinium, 4-[[4-[(diethylamino)carbonyl]phenyl(3-hydroxyphenyl)methyl]-1,2,5-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CN 1

CN 155766-59-8

CNF C26 H31 N2 O2



CN 2

CNF 16722-51-3

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CMF C7 H7 03 S



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NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days
of publication
NEWS 7 JAN 28 TOKCENTER enhanced with reloaded HEADLINE segment
NEWS 8 JAN 28 HEADLINE and LHEADLINE reloaded with enhancements
NEWS 9 FEB 08 STN Express, Version 6.3, now available
NEWS 10 FEB 20 PCI now available as a replacement to DPCI
NEWS 11 FEB 25 IPFHEX reloaded with enhancements
NEWS 12 FEB 25 INSPRODUCT reloaded with enhancements
NEWS 13 FEB 29 WPIINDEX/WPIIDS/WPIX enhanced with ECLA and current
U.S. National Patent Classification
NEWS 14 MAR 31 IPICDB, IFIPAT, and IFIUDB enhanced with new custom

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applications updated
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NEWS 18 MAR 31 ENGASE, EMGAL, and LENGASE reloaded with enhancements
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NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
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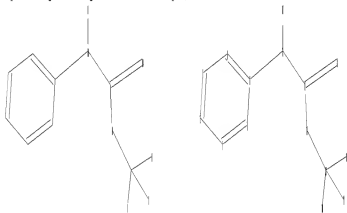
<http://www.cas.org/support/stngen/stdoc/properties.html>

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chain nodes :

7 8 10 11

ring nodes :

1 2 3 4 5 6

ring/chain nodes :

9 12 13 14 15

chain bonds :

4-7 7-8 7-15 8-9 8-10 10-11 11-12 11-13 11-14

ring bonds :

1-6 1-2 2-3 3-4 4-5 5-6

exact/norm bonds :

4-7 7-8 8-9 8-10 10-11

exact bonds :

7-15 11-12 11-13 11-14

normalized bonds :

1-6 1-2 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

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L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> s l1

SAMPLE SEARCH INITIATED 17:22:01 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 10676 TO ITERATE

18.7% PROCESSED 2000 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROTECTED ITERATIONS: 207328 TO 219712

PROTECTED ANSWERS: 6018 TO 8286

L3 50 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 17:22:06 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 213888 TO ITERATE

100.0% PROCESSED 213888 ITERATIONS

8171 ANSWERS

SEARCH TIME: 00.00.01

L4 8171 SEA SSS FUL L1

=> s piperidine/rsd

'RSD' IS NOT A VALID FIELD CODE

L5 0 PIPERIDINE/RSD

=> s piperidine/cn

L6 1 PIPERIDINE/CN

=> d rsd 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

Ring System Data

Elemental	Elemental	Size of	Ring System	Ring	RD
Analysis	Sequence	the Rings	Formula	Identifier	Occurrence
EA	ES	SZ	RF	RID	Count
=====					
CSN	WCS	16	CSN	46.156.1	1

=> s 46.156.1

L7 0 46.156.1

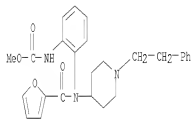
N-(2-acetylaminophenyl)-N-(1-phenethylpiperidin-4-yl)propionic acid amide oxalic acid salt was prepared in several steps from 1-phenethyl-4-piperidone and 2'-aminoacetanilide. In a binding assay for the μ opioid receptor, one compound of this invention showed IC50 value of 2.4 nM, vs. IC50 value of 21 nM shown by fentanyl.

IT 910876-65-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of N-substituted-N-(4-piperidinyl)amide derivs. as analgesics)

RN 910876-65-2 CAPLUS

CM Carbanic acid, [2-[(2-furanylcarbonyl)[1-(2-phenylethyl)-4-piperidinyl]amino]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



IT 910876-66-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-substituted-N-(4-piperidinyl)amide derivs. as analgesics)

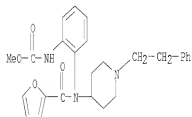
RN 910876-66-3 CAPLUS

CM Carbanic acid, [2-[(2-furanylcarbonyl)[1-(2-phenylethyl)-4-piperidinyl]amino]phenyl]-, methyl ester, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRM 910876-65-2

CMP C26 E23 N3 O4



CM 2

CRM 144-62-7

CMP C2 H2 O4

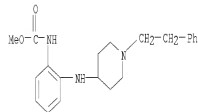


IT 910876-64-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-substituted-N-(4-piperidinyl)amide derivs. as analgesics)

RN 910876-64-1 CAPLUS

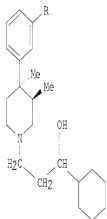
CM Carbanic acid, [2-[[1-(2-phenylethyl)-4-piperidinyl]amino]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

2005:708470 Document No. 143:221840 SAR and biological evaluation of novel trans-3,4-dimethyl-4-arylpiperidine derivatives as opioid antagonists. Diaz, Nuria; Benvenia, Mark; Emerson, Paul; Favors, Ryan; Mangold, Michael; McKinzie, Jamie; Patel, Nita; Peters, Steven; Quimby, Steven; Shannon, Harlan; Siegel, Miles; Statnick, Michael; Thomas, Elizabeth; Woodland, Joseph; Surface, Peggy; Mitch, Charles (Discovery Research, Eli Lilly and Company, Indianapolis, IN, 46285, USA). Biorganic & Medicinal Chemistry Letters, 15(17), 3844-3848 (English) 2005. CODEN: BMCLEB. ISSN: 0960-894X. OTHER SOURCES: CASREACT 143:221840. Publisher: Elsevier B.V..

GI



I

AB The phenolic hydroxy group of opiate-derived ligands is of known importance for biol. activity. We have developed a SAR study around LY255582 (I; R = OH) by comparing the effect of the hydroxy group in the 2- and 4-position of the Ph ring. Also, we have proved that the 3-position of the Ph ring is optimal for opioid activity. Furthermore, we have successfully replaced the hydroxy group in I by carbamate and carboxamide groups. The new analogs have high affinity for the opioid receptors comparable to the corresponding phenol. Carboxamide analog I (R = CONH2) has an improved metabolism profile and proved to be efficacious in in vivo studies.

II 862911-47-5P

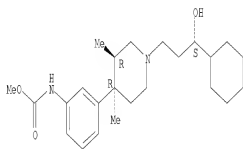
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THJ (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(trans-3,4-dimethyl-4-aryl)piperidine derivs. as opioid antagonists)

RN 862911-47-5 CAPLUS

CN Carbanic acid, [3-[(1R,4R)-1-[(3S)-3-cyclohexyl-3-hydroxypropyl]-3,4-dimethyl-4-piperidinyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

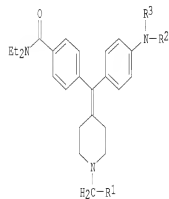


L16 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

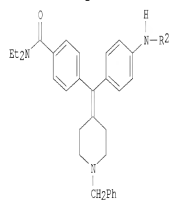
2005:638846 Document No. 143:153235 Preparation of

diarylmethtlidenylpiperidines for the management of pain. Brown, William; Griffin, Andrew; Walpole, Christopher (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2005/06128 A1 2005/0721, 56 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DL, EC, EE, EG, ES, FI, GB, GD, GE, GR, GU, HN, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NL, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SH, SI, SJ, IT, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CU, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, ML, MR, NE, NG, NI, SE, SN, TD, TG, TR. (English). COHEN: PIMX02. APPLICATION: WO 2005-0613 2005/01/05. PRIORITY: SE 2004-25 2004/01/09.

GI



I

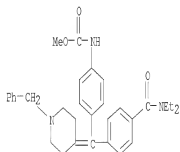


II

AB Title compds. I [R1 = (un)substituted aryl, heteroaryl; R2 = alkyl, H; R3 = H, ORN, SO2RN, etc.; R4 = H, alkyl, alkenyl, etc.] and their pharmaceutically acceptable salts were prepared. For example, N-acetylation of aniline II (R2 = H) with acetic anhydride afforded the TPA salt of diarylmethylidenylpiperidine II (R2 = COCH3) in 100% yield. In human δ receptor assays, certain examples of compds. I exhibited IC50

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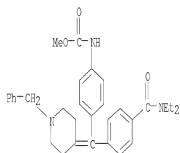
values ranging from 0.22-2.34 nM, with an average of 0.98 nM (sic).
IT 859911-52-7P 859911-53-8P
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of diarylmethylidenepiperidines for the management of pain)
RN 859911-52-7 CAPLUS
CN Carbanic acid, [4-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-
piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-53-8 CAPLUS
CN Carbanic acid, [4-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-
piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate)
(9CI) (CA INDEX NAME)

CM 1

CRN 859911-52-7
CMF C32 H37 N3 O3



CM 2

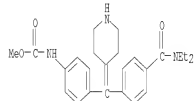
CRN 76-05-1
CMF C2 H F3 O2

Page 539

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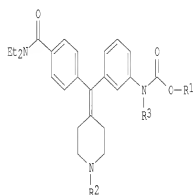
IT 859911-61-8P
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of diarylmethylidenepiperidines for the management of pain)
RN 859911-61-8 CAPLUS
CN Carbanic acid, [4-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-
piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



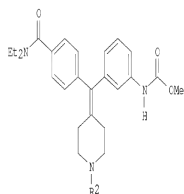
L16 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on SIN
2005:638845 Document No. 143:153294 Preparation of
diarylmethylidenepiperidines for the management of pain. Brown, William;
Griffin, Andrew (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2005066127 A1
20050721, 67 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA,
BB, BG, BR, BW, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC,
EE, EG, ES, FI, GE, GD, GR, GT, HK, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LE, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ,
NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT,
BE, BF, BG, CA, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE,
IS, IT, LU, MC, ML, MS, NE, NL, PT, SE, SN, TD, TG, TR. (English).
CODEN: PIMXCR. APPLICATION: WO 2005-SE12 20050105. PRIORITY: SE 2004-26
20040109.

GI

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I



II

AB Title compds. I [R1, R3 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts were prepared. For example, N-alkylation of piperidine II (R2 = H) with 1-iodopropane afforded the TFA salt of diarylmethylidene piperidine II (R2 = CH2CH2CH3) in 54% yield. In human δ receptor assays, certain examples of compds. I exhibited IC50 values ranging from 0.18-3.7 nM, with an average of 0.56 nM (sic).

II 859911-03-8P 859911-04-9P 859911-05-0P
859911-06-1P 859911-07-2P 859911-08-3P
859911-15-2P 859911-16-3P 859911-17-4P
859911-18-5P 859911-19-6P 859911-20-9P
859911-21-0P 859911-22-1P 859911-23-2P
859911-24-3P 859911-25-4P 859911-26-5P
859911-33-4P 859911-34-5P 859911-35-6P,

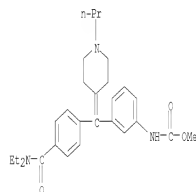
[3-[[[4-[(diethylamino)carbonyl]phenyl]](1-(2-methoxyethyl)-4-piperidinylidene)methyl]phenyl]carbamate methyl ester

RL: PAC (Pharmacological activity); SPM (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); US2S (Uses)

(preparation of diarylmethylidene piperidines for the management of pain)

BN 859911-03-8 CAPLUS

CN Carbamic acid, [3-[[[4-[(diethylamino)carbonyl]phenyl]](1-propyl-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



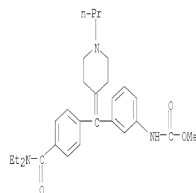
BN 859911-04-9 CAPLUS

CN Carbamic acid, [3-[[[4-[(diethylamino)carbonyl]phenyl]](1-propyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 859911-03-8

CMF C28 H37 N3 O3



CM 2

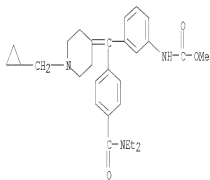
CRM 76-05-1

CMF C2 H F3 O2



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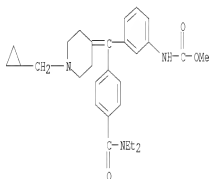
RN 859911-05-0 CAELUS
 CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-
 [(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA
 INDEX NAME)



RN 859911-06-1 CAELUS
 CN Carbamic acid, [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-
 [(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester,
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-05-0
 CMF C29 H37 N3 O3



CM 2

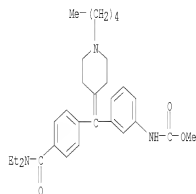
CRN 76-05-1
 CMF C2 H F3 O2

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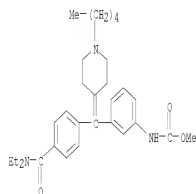
RN 859911-07-2 CAELUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-pentyl-4-
 piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-08-3 CAELUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-pentyl-4-
 piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate)
 (9CI) (CA INDEX NAME)

CM 1

CRN 859911-07-2
 CMF C30 H41 N3 O3



CM 2

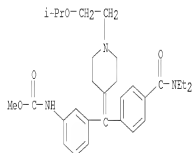
Page 544

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CRN 76-05-1
CMF C2 H F3 O2



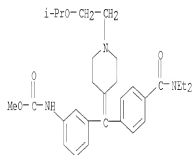
RN 859911-15-2 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-{1-methylethoxy}ethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 859911-16-3 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-{1-methylethoxy}ethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-15-2
CMF C30 H41 N3 O4



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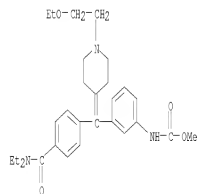
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CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 859911-17-4 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



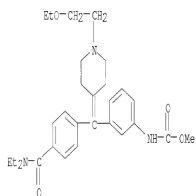
RN 859911-18-5 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-17-4
CMF C29 H39 N3 O4

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CM 2

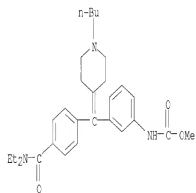
CRN 76-05-1

CMP C2 H F3 O2



RN 859911-19-6 CAPLUS

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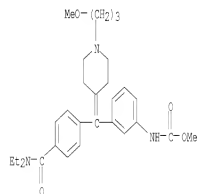
● HCl

Page 547

Print selected from 10541656.trn

RN 859911-20-9 CAPLUS

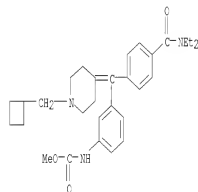
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(3-methoxypropyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 859911-21-0 CAPLUS

CN Carbamic acid, [3-[[1-(cyclobutylmethyl)-4-piperidinylidene]4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-22-1 CAPLUS

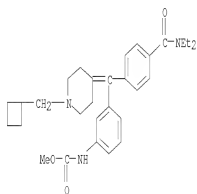
CN Carbamic acid, [3-[[1-(cyclobutylmethyl)-4-piperidinylidene]4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-21-0

CMP C30 H39 N3 O3

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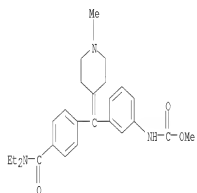


CM 2

CRN 76-05-1
CMF C2 H F3 O2



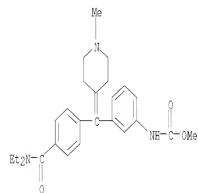
RN 859911-23-2 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-24-3 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-methyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-23-2
CMF C26 H33 N3 O3

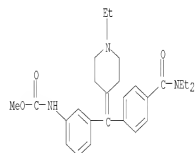


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 859911-25-4 CAPLUS
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-26-5 CAPLUS

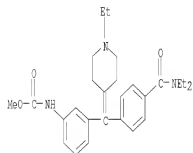
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CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-ethyl-4-piperidinylidene)methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 859911-25-4

CMF C27 H35 N3 O3



CM 2

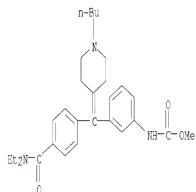
CRN 76-05-1

CMF C2 H F3 O2



RN 859911-33-4 CAPLUS

CN Carbamic acid, [3-[[1-butyl-4-piperidinylidene](4-[(diethylamino)carbonyl]phenyl)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

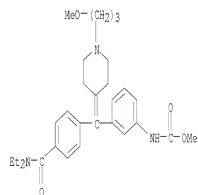


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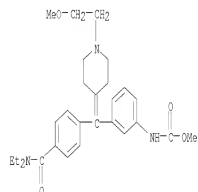
RN 859911-34-5 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-(3-methoxypropyl)-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 859911-35-6 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](1-(2-methoxyethyl)-4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



IT 725223-85-6P

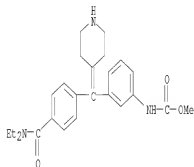
RL: RCT (Reactant); SPN (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)

(preparation of diarylmethylpiperidines for the management of pain)

RN 725223-85-6 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl](4-piperidinylidene)methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

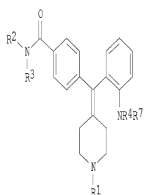
Page 552



116 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on SIM

2004:1016017 Document No. 142:6430 Preparation of diarylmethylenedioxy piperidine derivatives as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders. Brown, William L.; Griffin, Andrew; Jin, Shujuan (Astrazeneca AB, Sued.; Astrazeneca UK Limited). PCT Int. Appl. No. 2004/015222 11 2004:1125, 131 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, T, TW, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PDXD22. APPLICATION: WO 2004-GB2074 20040513. PRIORITY: SE 2003-1444 20030516; SE 2004-24 20040109.

GI



AB The title compds. [I; R¹ = H, (un)substituted alkyl, aryl, etc.; R²-R⁴ = H, (un)substituted alkyl, cycloalkyl; R⁷ = H, OH, alkyl, etc.] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R¹ = H; R², R³ = Et; R⁴ = CO₂H; R⁷ = H], starting from 4-(bromomethyl)benzoate, was given. The compds. I

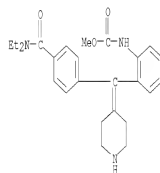
were found to be active toward human δ receptors. Generally, for most of the compds. I the IC₅₀ values are in the range of 0.48 nM to 17.9 nM. The pharmaceutical composition comprising the compound I is disclosed.

IT 798549-78-7P

RL: PNC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); SACT (Reactant or reagent); USES (Uses) (preparation of diarylmethylenedioxy piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 798549-78-7 CAPLUS

CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl]-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



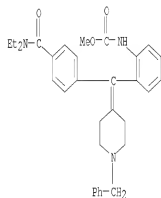
IT 798549-81-2P 798549-82-3P 798549-87-8P 798549-88-9P 798549-91-4P 798549-92-5P 798550-04-6P 798550-05-7P 798550-06-8P 798550-07-9P 798550-08-0P 798550-09-1P 798550-32-0P 798550-33-1P

RL: PNC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of diarylmethylenedioxy piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 798549-81-2 CAPLUS

CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl]-1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

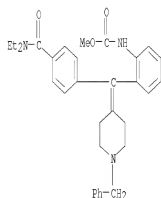
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RN 798549-82-3 CAPLUS
CM Carbanic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-81-2
CMF C32 H37 N3 O3



CM 2

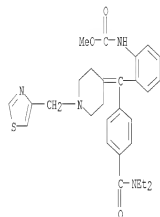
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CMF C2 H F3 O2



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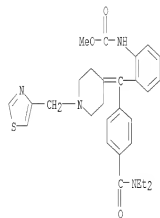
RN 798549-87-8 CAPLUS
CM Carbanic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 798549-88-9 CAPLUS
CM Carbanic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-87-8
CMF C29 H34 N4 O3 S



CM 2

CRN 76-05-1

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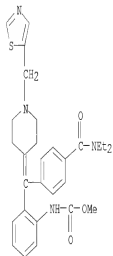
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CMF C2 H F3 O2



RN 799549-91-4 CAMELOS

CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 799549-92-5 CAMELOS

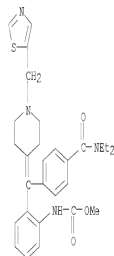
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, triFluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRM 799549-91-4

CMF C29 H34 N4 O3 S

Print selected from 10541656.trn



CM 2

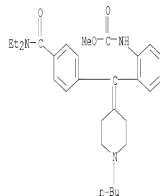
CRM 76-05-1

CMF C2 H F3 O2



RN 798550-04-6 CAMELOS

CN Carbamic acid, [2-[[1-butyl-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

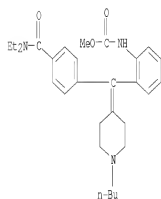


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RN 798550-05-7 CAPLUS
 CN Carbamic acid, [2-[[1-butyl-4-piperidinylidene]4-
 [(diethylamino)carbonyl]phenylmethyl]phenyl]-, methyl ester,
 trifluoroacetate (10:27) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-04-6
 CMP C29 H39 N3 O3



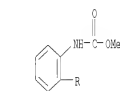
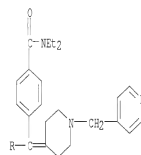
CM 2

CRN 76-05-1
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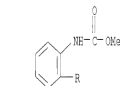
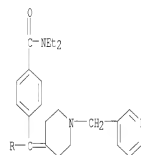


RN 798550-06-8 CAPLUS
 CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-
 pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
 (CA INDEX NAME)

Print selected from 10541656.trn



RN 798550-07-9 CAPLUS
 CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(3-
 pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
 (CA INDEX NAME)

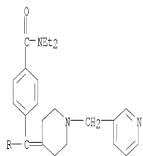


RN 798550-08-0 CAPLUS
 CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(3-
 pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester,
 bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

Print selected from 10541656.trn

CRN 798550-07-9
CMP C31 H36 N4 O3



CM 2

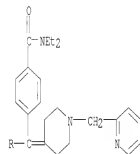
CRN 76-05-1
CMP C2 H F3 O2



RN 799550-09-1 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(2-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)

Page 561

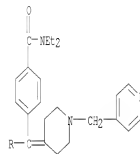
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RN 798550-02-0 CAPLUS
CN Carbamic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (5:1) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-06-8
CMP C31 H36 N4 O3



Page 562

Print selected from 10541656.trn

CM 2

CRN 76-05-1
CMF C2 H F3 O2

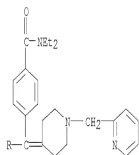


RN 798550-33-1 CMEUJS

CM Carbanic acid, [2-[[4-[(diethylamino)carbonyl]phenyl][1-(2-pyridylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 798550-09-1
CMF C31 H36 N4 O3



CM 2

CRN 76-05-1
CMF C2 H F3 O2

Page 563

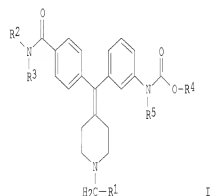
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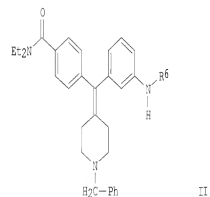
L16 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

2004:606441 Document No. 141:140324 Preparation of diarylmethylene piperidines as δ -opioid receptor ligands for the treatment of pain.. Brown, William; Griffin, Andrew; Walpole, Christopher (AstraZeneca Ab, Sued.; AstraZeneca UK Limited). PCT Int. Appl. WO 2004/043157 A1 20040723, 56 pp. DESIGNATED STATES: W: AE, AE, AG, AL, AU, BM, AM, AN, AT, AU, AZ, BA, BB, BG, BS, BR, BW, BY, BY, BZ, CA, CH, CN, CO, CR, CU, CY, CZ, DE, DE, DK, DM, DO, EC, EC, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GR, GR, HA, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, LC, LC, LR, LR, LS, LS, LT, LU, LV, LV, MA, MD, MD, MG, MG, MN, MW, MX, MX. (English). CODEN: PIXXO2. APPLICATION: WO 2004-03116 20040113. PRIORITY: SE 2003-103 20030116.

GI



I



II

Page 564

AB Title compds. I [R1 = (un)substituted aryl, heteroaryl; R2, R3, R4, R5 = H, alkyl, cycloalkyl] and their pharmaceutically acceptable salts were prepared. For example, acylation of aniline II [R6 = H], e.g., prepared from 4-(bromomethyl)benzoic acid Me ester in 8-steps, with Me chloroformate, afforded piperidine II [R6 = COOMe] as the trifluoroacetic acid salt in 38% yield. In human δ -opioid receptor binding assays, 4-examples of compds. I exhibited IC50 values ranging from 0.30-0.49 nM, e.g., the IC50 value of piperidine II [R6 = COOMe] was 0.49 nM. Compds. I are claimed useful in the management of pain.

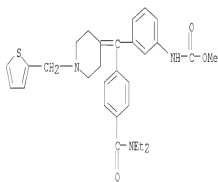
IT 725229-70-9F 725229-71-0F 725229-72-1P
725229-73-2F 725229-74-3F 725229-75-4P
725229-76-5F 725229-78-7F 725229-79-8P
725229-80-1P

RI: PAC (Pharmacological activity); SYN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USFS (Uses)

(preparation of diarylmethylidene piperidines as δ -opioid receptor ligands for the treatment of pain.)

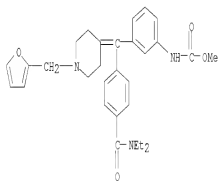
RN 725229-70-9 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



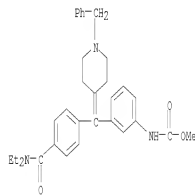
RN 725229-71-0 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-furanyl)methyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



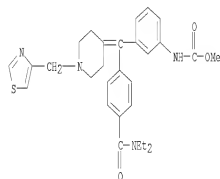
RN 725229-72-1 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 725229-73-2 CAPLUS

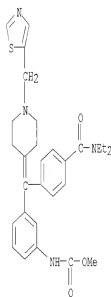
CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 725229-74-3 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

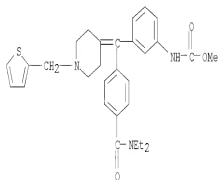
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RN 725229-75-4 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 725229-70-9
 CMF C30 H35 N3 O3 S



CM 2

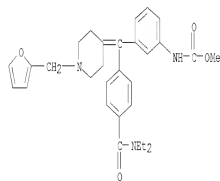
CRM 76-05-1
 CMF C2 H F3 O2

Page 567

Print selected from 10541656.trn



RN 725229-76-5 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-furanyl)ethyl]-4-piperidinylidene]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

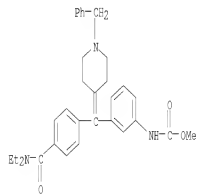


● HCl

RN 725229-78-7 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRM 725229-72-1
 CMF C32 H37 N3 O3



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Print selected from 10541656.trn

CM 2

CRN 76-05-1
CMF C2 H F3 O2

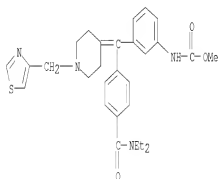


RN 725229-79-8 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(4-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725229-73-2
CMF C29 H34 N4 O3 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2



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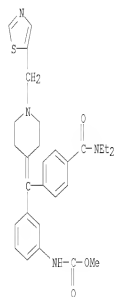
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RN 725229-80-1 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][1-(5-thiazolylmethyl)-4-piperidinylidene]methyl]phenyl]-, methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 725229-74-3
CMF C29 H34 N4 O3 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT 725229-85-6P

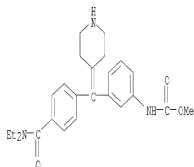
RL: RCT (Reactant); SPN (Synthetic preparation); PRDP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylene piperidines as δ -opioid receptor ligands for the treatment of pain.)

RN 725229-85-6 CAPLUS

CM Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-4-

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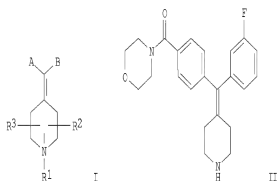
piperidinylidenemethyl[phenyl]-, methyl ester (9CI) (CA INDEX NAME)



116 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STM

1998:479508 Document No. 129:95406 Preparation of 4-[diaryl- or (arylheteroaryl)methylene]piperidine derivatives with analgesic effect. Delorme, Daniel; Roberts, Edward; Wei, Zhongyong (Astra Pharma Inc., Can.; Astra Aktiebolag (Publ)). PCT Int. Appl. WO 9828275 A1 19980702, 129 pp. DESIGNATED STATES: N: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NC, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, EG, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXX02. APPLICATION: WO 1997:SE2050 19971209. PRIORITY: SE 1996-4785 19961220; SE 1997-2535 19970701.

GI



AB Comps. of general formula [I]; R1 = H, linear or branched C1-6 alkyl, C1-6 alkenyl, C3-8 cycloalkyl, C1-6 cycloalkyl-C1-2 alkyl, C6-10 aryl, heteroaryl having 5 to 10 atoms selected from C, S, N, and O, C1-2 alkyl-(un)substituted C6-10 aryl, C1-2 alkyl-(un)substituted heteroaryl having 5 to 10 atoms selected from C, S, N, and O; R2, R3 = H, C1-6 alkyl;

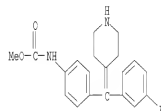
A = N and/or benzene-ring 4-carbamoylphenyl, 4-sulfamoylphenyl, acylaminoophenyl, or acylphenyl wherein N and/or benzene-ring are optionally substituted; B = (un)substituted aromatic, heteroarom., hydroarom., or heterohydroarom. moieties having 5 to 10 atoms selected from C, S, N, and O atoms] are disclosed and claimed in the present application, as well as their pharmaceutically acceptable salts, pharmaceutical comps. comprising the novel comps., their use in therapy, in particular in the management of pain and in the treatment of gastrointestinal disorders, spinal injuries, disorders of the sympathetic nervous system, and isotopically labeled I as diagnostic agents. The comps. are ligands for opioid receptor, have analgesic effect, and are useful for the treatment of various pain conditions such as chronic pain, acute pain, cancer pain, pain caused by rheumatoid arthritis, migraine, visceral pain, etc. (no data). Thus, tert-Bu 4-[bromo[4-(morpholinocarbonyl)phenyl)methylene]-4-piperidinecarboxylate (preparation given) was coupled with 3-fluorophenylboronic acid in the presence of (PPh3)4Pd and Na2CO3 in aqueous EtOH at 80° for 2 h under N followed by treatment with CF3COOH and acidification with aqueous HCl to give the title compound (II, 9CI).

IT 209807-97-6P

RI: SEN (Synthetic preparation); THU (Therapeutic use); RIOL (Biological study); PREP (Preparation); USBS (Uses) (preparation of [diaryl- or (arylheteroaryl)methylene]piperidine deriva. with analgesic effect)

RN 209807-97-6 CAPLUS

CN Carbamic acid, [4-[(3-fluorophenyl)-4-piperidinylidenemethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



>> d his

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FILE 'REGISTRY' ENTERED AT 17:21:42 ON 14 APR 2008

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L3 50 S L1
L4 8171 S L1 FULL
L5 0 S PIPERIDINE/RSD
L6 1 S PIPERIDINE/CN
L7 0 S 46.156.1
L8 1326576 S 46.156.1/RD
L9 1 S PIPERAZINE/CN
L10 0 S 46.393.1

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L12 336 S L8 AND L4
L13 401 S L11 AND L4

FILE 'CAPLUS' ENTERED AT 17:23:52 ON 14 APR 2008

L14 96 S L12
L15 57 S L13
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45107 OPIOID
(OPIOID OR OPIOIDS)
L17 3 L15 AND OPIOID

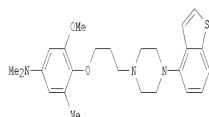
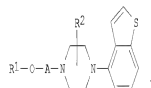
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L18 3 L17 NOT L16

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L18 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS ON STM
2007:257347 Document No. 146:316939 Preparation of benzo[b]thiophen-4-yl-piperazine and related compounds as antipsychotic agents for the treatment of mental disorders. Yamashita, Hiroshi; Matsubara, Jun; Oshima, Manio; Kuroda, Hideaki; Ito, Nobuaki; Miyamura, Shin; Shimizu, Satoshi; Tanaka, Tatsuyoshi; Taira, Shinichi; Kondo, Kazumi; Ito, Toshiro; Motohiro, Bando, Masahiko; Fukushima, Tetsu; Oshiro, Yasuo; Takahashi, Haruka; Sakurai, Yohji; Kuroda, Takeshi; Shimada, Jun; Maeda, Kenji; Tadok, Yoshihiro; Amada, Naoki; Akazawa, Hitomi; Yamashita, Juniko; Mori, Atsushi; Uehodo, Yasufumi; Masumoto, Takumi; Sugino, Haruhiko; Kikuchi, Tetsuro; Hashimoto, Kazuya (Otsuka Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2007/026959 A2 20070308, 48pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GN, GR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ; BW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXX2. APPLICATION: WO 2006-JP317704 20060831. PRIORITY: JP 2005-251055 20050831.

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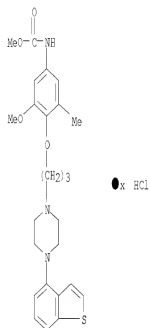


II

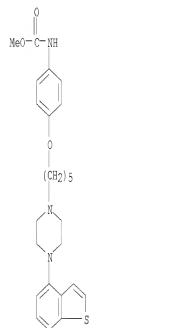
AB Title compds. I (R1 = cycloalkyl, (un)substituted aryl, heterocyclyl; R2 = H or lower alkyl; A = lower alkylene or lower alkenylene), and their pharmaceutically acceptable salts, are prepared and disclosed as antipsychotic agents for the treatment of mental disorders. Thus, e.g., II-HCl was prepared via nucleophilic substitution of [4-(3-chloropropoxy)-3-methoxy-5-methylphenyl]-carbamic acid tert-Bu ester (preparation given) with 1-benzo[b]thiophen-4-yl-piperazine hydrochloride (preparation given) followed by deprotection and dimethylation. Binding assays were used to determine Ki values for I, e.g., II-HCl demonstrated Ki values of 0.4 nM in Dopamine D2 receptor and 5.9 nM in Serotonin 5-HT2A receptor. Serotonin uptake inhibitory activity of II-HCl was also determined as 95.3%. The invention compds. may be widely used in the treatment and prevention of mental disorders including central nervous system disorders, while demonstrating no side effects.

IT 928221-80-IP
RI: PNC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); TSU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of benzo[b]thiophen-4-yl-piperazine and related compds. as antipsychotic agents for the treatment of mental disorders)

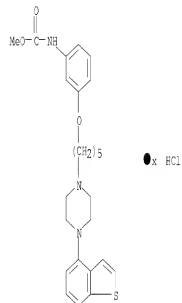
RN 928221-80-1 CAPLUS
CN Carboamic acid, N-[4-[3-(4-benzo[b]thien-4-yl-1-piperazinyl)propoxy]-3-methoxy-5-methylphenyl]-, methyl ester, hydrochloride (1:7) (CA INDEX NAME)



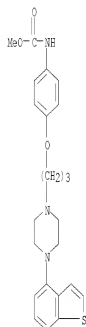
IT 928223-12-5P 928223-13-6P 928225-06-3P
 928225-19-8P 928225-27-8P 928226-35-1P
 928226-36-2P 928226-59-9P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (Preparation of benzo[b]thiophen-4-yl-piperazine and related compds. as
 antipsychotic agents for the treatment of mental disorders)
 RN 928223-12-5 CAPLUS
 CN Carbamic acid, N-[[4-[[3-(4-benzo[b]thien-4-yl-1-
 piperazinyl]pentyl]oxy]phenyl]-, methyl ester (CA INDEX NAME)



RN 928223-13-6 CAPLUS
 CN Carbamic acid, N-[[5-[[4-benzo[b]thien-4-yl-1-
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 INDEX NAME)

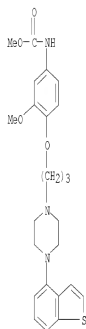


RN 928225-06-3 CAPLUS
 CN Carbamic acid, N-[[4-[[3-(4-benzo[b]thien-4-yl-1-piperazinyl]propoxy]phenyl]-
 , methyl ester (CA INDEX NAME)



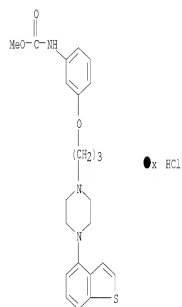
RN 928225-19-8 CAPLUS

CN Carbamic acid, N-[4-{3-(4-benzo[b]thien-4-yl-1-piperazinyl)propoxy}-3-methoxyphenyl]-, methyl ester (CA INDEX NAME)



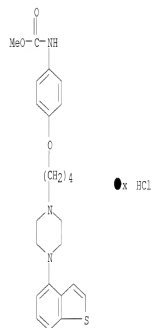
RN 928225-27-8 CAPLUS

CN Carbamic acid, N-[3-{3-(4-benzo[b]thien-4-yl-1-piperazinyl)propoxy}phenyl]-, methyl ester, hydrochloride (1:?) (CA INDEX NAME)



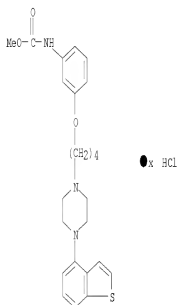
RN 928226-35-1 CAPLUS

CN Carbamic acid, N-[4-{4-(4-benzo[b]thien-4-yl-1-piperazinyl)butoxy}phenyl]-, methyl ester, hydrochloride (1:?) (CA INDEX NAME)



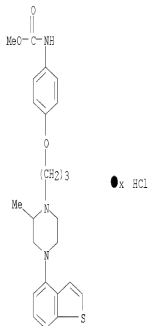
RN 928226-36-2 CAPLUS

CN Carbanic acid, N-[3-[4-(4-benzo[b]thien-4-yl-1-piperazinyl)butoxy]phenyl]-, methyl ester, hydrochloride (1:?) (CA INDEX NAME)



RN 928226-59-9 CAPLUS

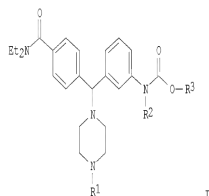
CN Carbanic acid, N-[4-[3-(4-benzo[b]thien-4-yl-2-methyl-1-piperazinyl)propoxy]phenyl]-, methyl ester, hydrochloride (1:?) (CA INDEX NAME)



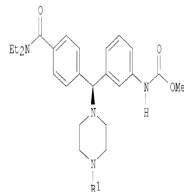
L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

2005:63880 Document No. 143:153402 Preparation of diarylmethylpiperazines as δ receptor ligands for the treatment of pain. Brown, William; Griffin, Andrew (AstraZeneca AB, Sweden). PCT Int. Appl. WO 2005066148 A1 20050721, 69 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LA, LB, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, ST, TJ, TM, TW, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RH: AT, BE, BF, BG, BT, CF, CG, CH, CI, CM, CU, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LI, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PINKO2. APPLICATION: NO 2005-SE14 20050105. PRIORITY: SE 2004-27 20040109.

GI



I



II

AB Title compds. I [R1 = alkyl, alkenyl, cycloalkyl, etc.; R2 = H, alkyl, cycloalkyl, etc.; R3 = alkyl, cycloalkyl] and their pharmaceutically acceptable salts were prepared. For example, N-alkylation of piperazine II (R1 = H) with bromomethyl Me ether afforded the HCl salt of claimed diarylmethylpiperazine II (R1 = CH2CH2OCH3) in 68% yield. In human

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6 receptor assays, certain examples of compds. I exhibited IC50 values ranging from 0.2-3.7 nM, with an average of 1 nM (sic).

IT 859634-99-4P 859635-00-0P 859635-01-1P
859635-02-2P 859635-03-3P 859635-04-4P
859635-05-5P 859635-06-6P 859635-07-7P
859635-08-8P 859635-09-9P 859635-10-2P
859635-11-3P 859635-12-4P 859643-90-6P
859643-91-7P 859643-92-8P 859643-93-9P
859643-94-0P 859643-95-1P 859643-96-2P
859643-97-3P

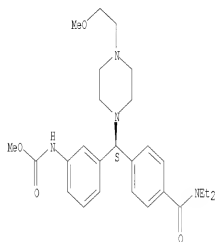
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THW (Therapeutic use); BIOL (Biological study); PREP (Preparation); USNS (Uses)

(preparation of diarylmethylpiperazines as 6 receptor ligands for treatment of pain)

RN 859634-99-4 CAELUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-methoxyethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



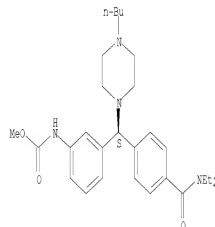
● HCl

RN 859635-00-0 CAELUS

CN Carbamic acid, [3-[(S)-[4-(4-butyl-1-piperazinyl)[4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

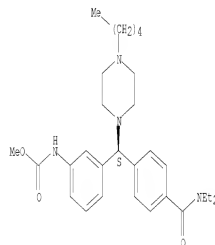
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RN 859635-01-1 CAELUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

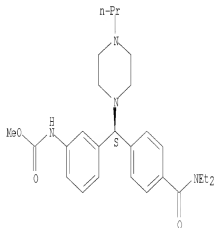


RN 859635-02-2 CAELUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-propyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

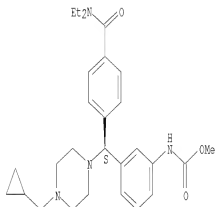
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RN 859635-03-3 CAPLUS

CN Carbamic acid, [3-[(S)-[4-(cyclopropylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

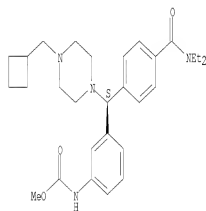


RN 859635-04-4 CAPLUS

CN Carbamic acid, [3-[(S)-[4-(cyclobutylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

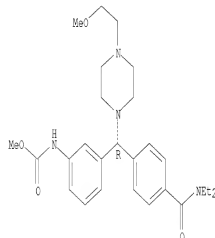
Print selected from 10541636.trn



RN 859635-05-5 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-methoxyethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

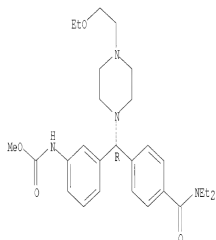


RN 859635-06-6 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-methoxyethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Print selected from 10541636.trn

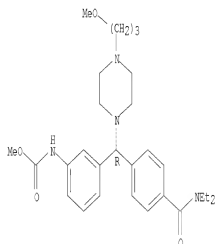


● HCl

RN 859635-07-7 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-methoxypropyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

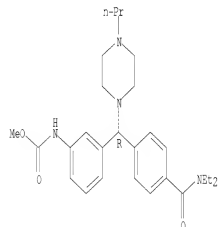


RN 859635-08-8 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-propyl-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

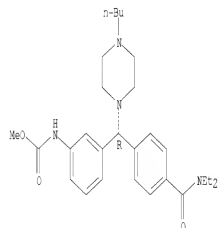
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RN 859635-09-9 CAPLUS

CN Carbamic acid, [3-[(R)-[4-butyl-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

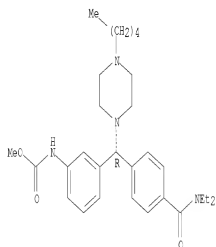
Absolute stereochemistry. Rotation (-).



RN 859635-10-2 CAPLUS

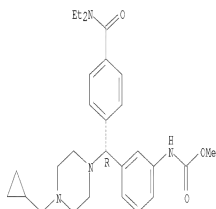
CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-pentyl-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



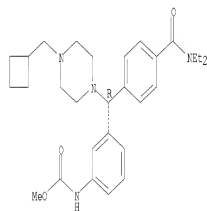
RN 859635-11-3 CAPLUS
 CN Carbamic acid, [3-[(R)-[4-(cyclopropylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



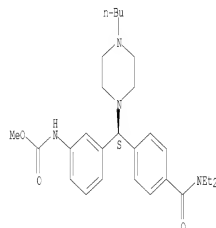
RN 859635-12-4 CAPLUS
 CN Carbamic acid, [3-[(R)-[4-(cyclobutylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 859843-90-6 CAPLUS
 CN Carbamic acid, [3-[(S)-[4-butyl-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

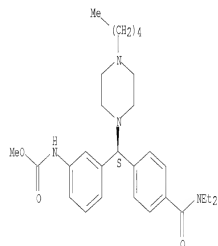


● BCI

RN 859843-91-7 CAPLUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-pentyl-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn

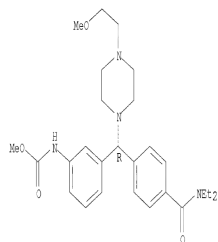


● HCl

RN 859843-92-8 CAPLUS

CN Carbanic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-methoxyethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



● HCl

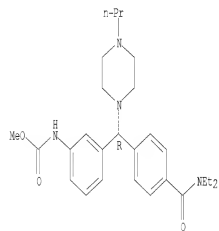
RN 859843-93-9 CAPLUS

CN Carbanic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-propyl-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA

Print selected from 10541656.trn

INDEX NAME)

Absolute stereochemistry. Rotation (-).

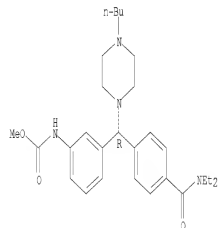


● HCl

RN 859843-94-0 CAPLUS

CN Carbanic acid, [3-[(R)-[4-butyl-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



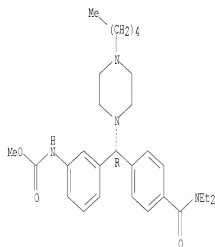
● HCl

RN 859843-95-1 CAPLUS

Print selected from 10541656.trn

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-pentyl-1-piperazinyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

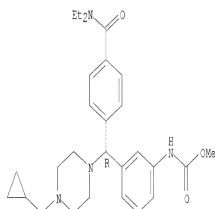


● HCl

RN 859843-96-2 CAPLUS

CN Carbamic acid, [3-[(R)-[4-(cyclopropylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



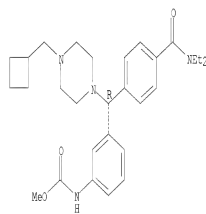
● HCl

Print selected from 10541656.trn

RN 859843-97-3 CAPLUS

CN Carbamic acid, [3-[(R)-[4-(cyclobutylmethyl)-1-piperazinyl][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



● HCl

IT 691890-45-6P 691890-46-7P 859635-21-5P

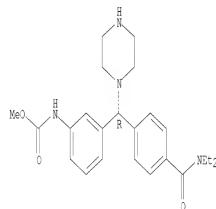
859844-02-3P

RL: RCT (Reactant); SPW (Synthetic preparation); PRGP (Preparation); RACT (Reactant or reagent)
(preparation of diarylmethylpiperazines as δ receptor ligands for treatment of pain)

RN 691890-45-6 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

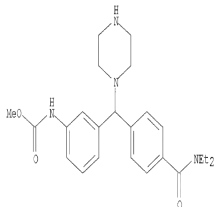


Print selected from 10541656.trn

RN 691890-46-7 CAPLUS

CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]-, methyl ester, (+)- (9CI) (CA INDEX NAME)

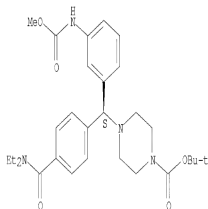
Rotation (+).



RN 859635-21-5 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(S)-4-[(diethylamino)carbonyl]phenyl][3-[(methoxycarbonyl)amino]phenylmethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

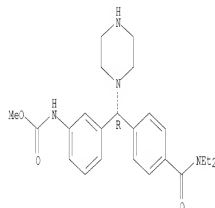


RN 859844-02-3 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



● BCl

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STM

2004:412932 Document No. 140:423709 Preparation of N-[4-(phenylpiperazinylmethyl)phenyl]carbamates for treatment of pain, anxiety, or gastrointestinal disorders. Brown, William; Griffin, Andrew; Jones, Paul; Page, Daniel; Plobeck, Niklas; Walpole, Christopher (Astrazeneca AB, Swed.). PCT Int. Appl. WO 2004/01802 A1 20040521. 72 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CI, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NI, NO, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DG, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). COBEN: P1XX02. APPLICATION: WO 2003-081707 20031105. PRIORITY: SE 2002-3303 20021107.

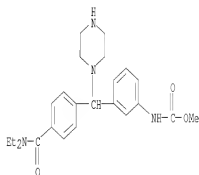
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein R1 = (un)substituted (hetero)aryl[alkyl]; R2 and R3 = independently H or (un)substituted (cyclo)alkyl; or pharmaceutically acceptable salts, diastereomers, enantiomers, or mixts. thereof] were prepared as opioid δ receptor ligands. For example, 4-carboxybenzaldehyde was amidated with diethylamine using SOCl₂ in CH₂Cl₂ to give N,N-diethyl-4-formylbenzamide (90%). Coupling of the amide with N-Boc-piperazine in the presence of benzotriazole in toluene, followed by reaction with 3-bromophenylisocyanide in DMF, afforded tert-Bu 4-[(3-bromophenyl)[4-[(diethylamino)carbonyl]phenyl]methyl]-1-piperazinecarboxylate (338). Coupling with Me carbonate (62%) using xantphos, Cs₂CO₃, and Pd(dba)₃ in dioxane, deprotection (89%) with TFA in CH₂Cl₂, and chiral HPLC separation of the enantiomers provided

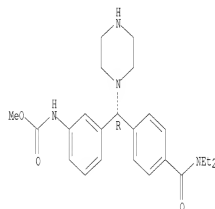
(-)-[3-[[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]carbamate Me ester. Reaction of the piperazine with benzaldehyde in the presence of NaBH(OAc)₃ in CH₂Cl₂ gave (R)-II. In binding assays using human 293S cells expressing cloned human opioid receptors and neomycin resistance, (R)-II and ten other exemplified compds. exhibited strong binding to the δ receptor with IC₅₀ values in the range of 0.25-0.74 nM and showed some activity toward the κ (IC₅₀ = 247-1636 nM) and μ (IC₅₀ = 90-1100 nM) receptors. In functional assays, (R)-II demonstrated δ receptor agonist activity by activating the binding of GTP to G-proteins. Thus, I and their pharmaceutical compds. are useful in therapy, in particular for the treatment of gastrointestinal disorders, anxiety, or pain (no date).

- IT 691890-44-5P, [3-[[4-[(diethylamino)carbonyl]phenyl]piperazin-1-ylmethyl]phenyl]carbamate methyl ester
 RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PTP (Physical process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses) (intermediate; δ receptor agonist; preparation of N-[[phenylpiperazinylmethyl]phenyl]carbamates as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)
 RN 691890-44-5 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



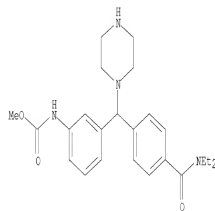
- IT 691890-45-4P 691890-46-7P
 RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of N-[[phenylpiperazinylmethyl]phenyl]carbamates as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)
 RN 691890-45-6 CAPLUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



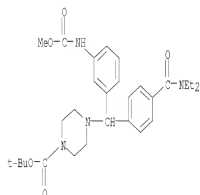
- RN 691890-46-7 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl]-1-piperazinylmethyl]phenyl]-, methyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



- IT 691890-43-4P, 4-[[4-[(diethylamino)carbonyl]phenyl][3-[[methoxy(phenyl)amino]phenyl]methyl]-1-piperazinecarboxylic acid 1,1-dimethylethyl ester
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of N-[[phenylpiperazinylmethyl]phenyl]carbamates as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)
 RN 691890-43-4 CAPLUS
 CN 1-Piperazinecarboxylic acid, 4-[[4-[(diethylamino)carbonyl]phenyl][3-[[methoxy(phenyl)amino]phenyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

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IT 691890-72-9C 691890-74-1P 691890-76-3P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 [6 receptor agonist; preparation of N-[(phenylpiperazinylmethyl)phenyl]carbamates as 6 receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders]

RN 691890-72-9 CAPLUS

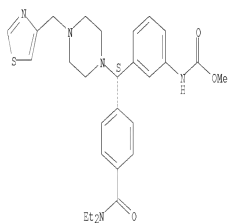
CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(4-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 691890-71-8

CMF C28 H35 N5 O3 S

Absolute stereochemistry. Rotation (+).



CM 2

CRN 76-05-1

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Print selected from 10541656.trn

CMF C2 H F3 O2



RN 691890-74-1 CAPLUS

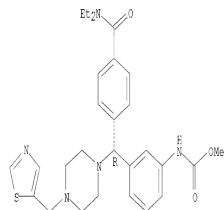
CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(5-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (5:13) (9CI) (CA INDEX NAME)

CM 1

CRN 691890-73-0

CMF C28 H35 N5 O3 S

Absolute stereochemistry. Rotation (-).



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-76-3 CAPLUS

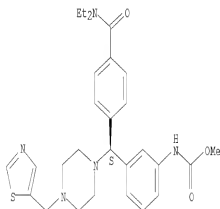
Page 598

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(5-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 691890-75-2
CMF C28 E55 W5 O3 S

Absolute stereochemistry. Rotation (+).



CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT 691890-51-4P, (R)-Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-benzylpiperazin-1-yl]methyl]phenyl]carbamate 691890-52-SP, (S)-Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-benzylpiperazin-1-yl]methyl]phenyl]carbamate 691890-53-6P 691890-54-7P 691890-55-8P 691890-56-9P 691890-57-0P 691890-58-1P 691890-59-2P 691890-60-3P 691890-61-4P 691890-62-5P 691890-63-6P 691890-64-7P 691890-65-8P 691890-66-9P 691890-68-3P 691890-69-4P 691890-70-5P 691890-71-6P 691890-72-7P 691890-73-8P 691890-74-9P 691890-75-0P 691890-77-4P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-benzylpiperazin-1-yl]methyl]phenyl]carbamate 691890-78-5P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(thien-2-

ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-79-6P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(thien-3-ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-80-9P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(2-furylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-81-0P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(3-furylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-82-1P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(1H-indazol-2-ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-83-2P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(pyridin-2-ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-84-3P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(pyridin-4-ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-85-4P, Methyl [3-[[4-[(diethylamino)carbonyl]phenyl][4-(1,3-thiazol-2-ylmethyl]piperazin-1-yl]methyl]phenyl]carbamate 691890-86-5P 691890-87-6P 691890-88-7P 691890-89-8P 691890-90-9P 691890-91-0P 691890-92-1P 691890-93-2P 691890-94-3P 691890-95-4P 691890-96-5P 691890-97-6P 691890-98-7P 691890-99-8P 691891-00-9P 691891-01-0P 691891-02-1P 691891-03-2P

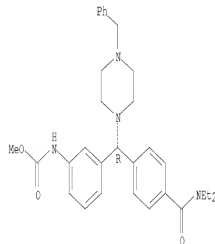
RL: PAC (Pharmacological activity); SPM (Synthetic preparation); THU (Therapeutic use); BIOU (Biological study); PREP (Preparation); USES (Uses)

(δ receptor agonist; preparation of N-[(phenylpiperazinylmethyl)phenyl]carbamates as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

RM 691890-51-4 CAPLUS

CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(phenylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

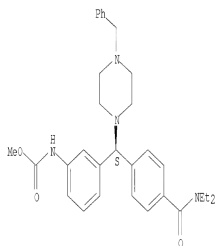


RM 691890-52-5 CAPLUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(phenylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Print selected from 10541656.trn

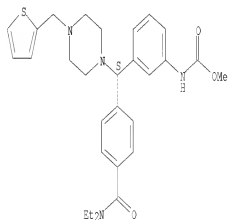
Absolute stereochemistry. Rotation (+).



RN 691890-53-6 CAPLUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

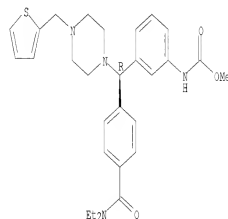


RN 691890-54-7 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

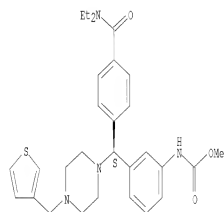
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RN 691890-55-8 CAPLUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

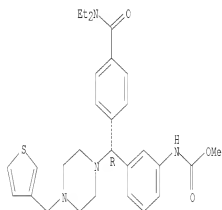


RN 691890-56-9 CAPLUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

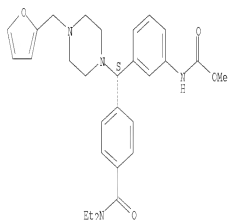
Print selected from 10541656.trn



RN 691890-57-0 CAELUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-furanyl)methyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

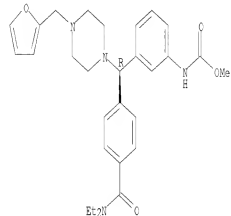


RN 691890-58-1 CAELUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-furanyl)methyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

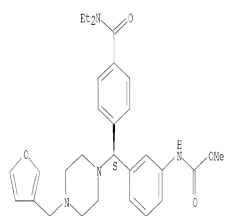
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RN 691890-59-2 CAELUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(3-furanyl)methyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

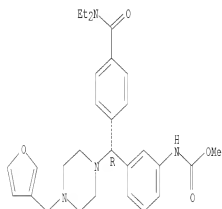


RN 691890-60-5 CAELUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-furanyl)methyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

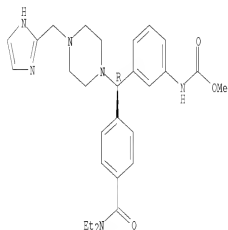
Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



RN 691890-61-6 CAPLUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(1H-imidazol-2-ylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

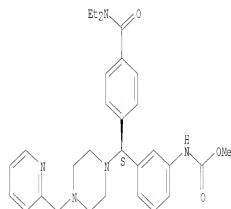
Absolute stereochemistry. Rotation (-).



RN 691890-62-7 CAPLUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

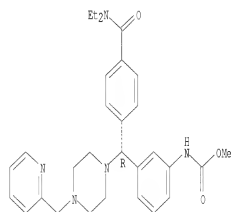
Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



RN 691890-63-8 CAPLUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

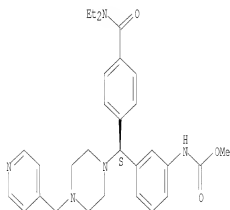
Absolute stereochemistry. Rotation (-).



RN 691890-64-9 CAPLUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(4-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

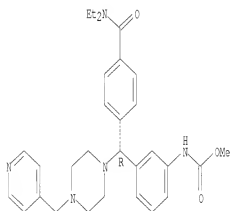
Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



RN 691890-65-0 CAELUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(4-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

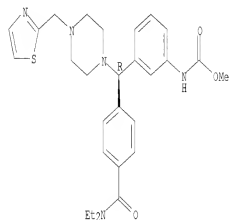
Absolute stereochemistry. Rotation (-).



RN 691890-66-1 CAELUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

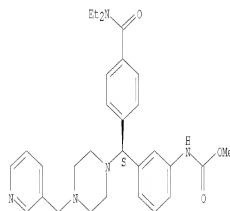
Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



RN 691890-68-3 CAELUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(3-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

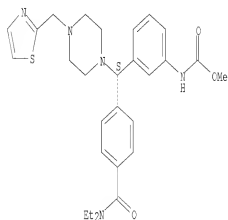
Absolute stereochemistry. Rotation (+).



RN 691890-69-4 CAELUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

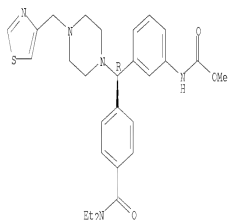
Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



RN 691890-70-7 CASLUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(4-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

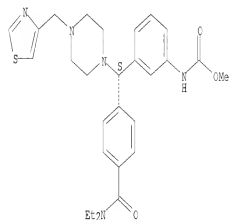
Absolute stereochemistry. Rotation (-).



RN 691890-71-8 CASLUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(4-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

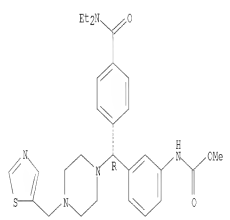
Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



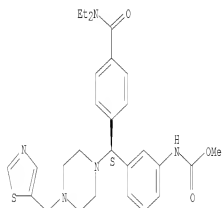
RN 691890-73-0 CASLUS
 CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(5-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

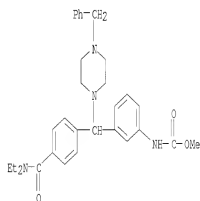


RN 691890-75-2 CASLUS
 CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(5-thiazolylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

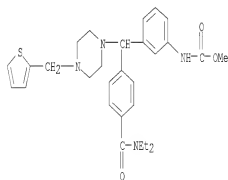
Absolute stereochemistry. Rotation (+).



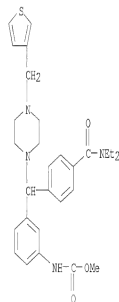
RN 691890-77-4 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(phenylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



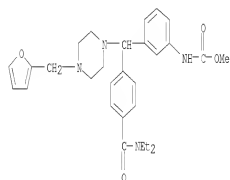
RN 691890-78-5 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(2-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



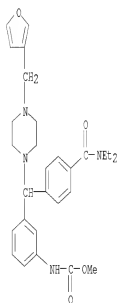
RN 691890-79-6 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 691890-80-9 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(2-furanylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

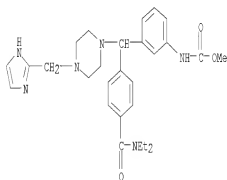


RN 691890-81-0 CAPLUS
 CN Carbamic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(3-furanylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



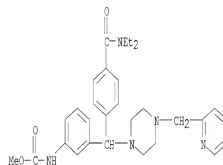
RN 691890-82-1 CAPLUS

CN Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(1H-imidazol-2-yl)methyl]-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



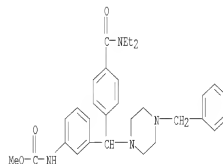
RN 691890-83-2 CAPLUS

CN Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



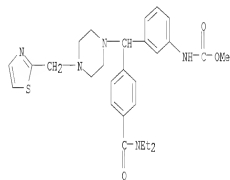
RN 691890-84-3 CAPLUS

CN Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(4-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 691890-85-4 CAPLUS

CN Carbanic acid, [3-[[4-[(diethylamino)carbonyl]phenyl][4-(2-thiazolylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 691890-86-5 CAPLUS

Print selected from 10541656.trn

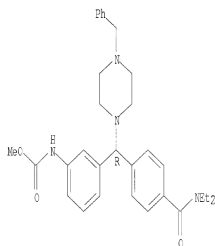
CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(phenylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 691890-51-4

CMF C31 H38 N4 O3

Absolute stereochemistry. Rotation (-).



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-87-6 CAPLUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(phenylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

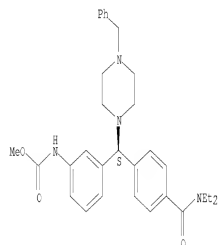
CM 1

CRN 691890-52-5

CMF C31 H38 N4 O3

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-88-7 CAPLUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

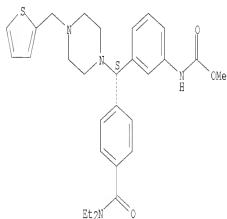
CM 1

CRN 691890-53-6

CMF C29 H36 N4 O3 S

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-89-8 CASUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

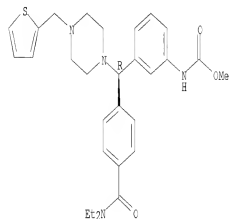
CM 1

CRN 691890-54-7

CMF C29 H36 N4 O3 S

Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-90-1 CASUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

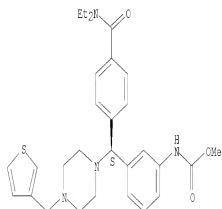
CM 1

CRN 691890-55-8

CMF C29 H36 N4 O3 S

Absolute stereochemistry. Rotation (+).

Print selected from 10541636.trn



CM 2

CRM 76-05-1

CMF C2 H F3 O2



RN 691890-91-2 CASUS

CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-thienylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

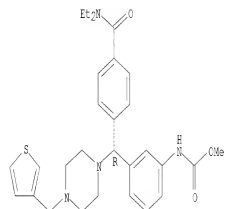
CM 1

CRM 691890-56-9

CMF C29 H36 N4 O3 S

Absolute stereochemistry. Rotation (-).

Print selected from 10541636.trn



CM 2

CRM 76-05-1

CMF C2 H F3 O2



RN 691890-92-3 CASUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-furanylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

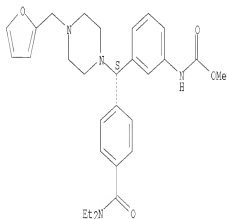
CM 1

CRM 691890-57-0

CMF C29 H36 N4 O4

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-93-4 CASUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-furanyl-1-methyl-1-piperazinyl)methyl]phenyl]-, methyl ester, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

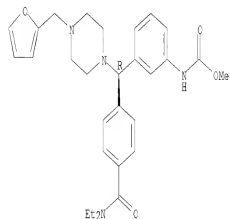
CM 1

CRN 691890-59-1

CMF C29 H36 N4 O4

Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691890-94-5 CASUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(3-furanyl-1-methyl-1-piperazinyl)methyl]phenyl]-, methyl ester, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

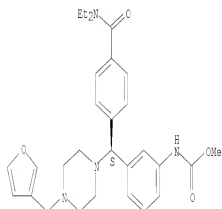
CM 1

CRN 691890-59-2

CMF C29 H36 N4 O4

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMP C2 H F3 O2



RN 691890-95-6 CAFLUS

CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(1H-imidazol-2-ylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

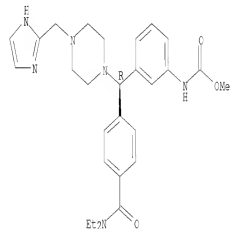
CM 1

CRN 691890-61-6

CMP C28 H56 N6 O3

Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



CM 2

CRN 76-05-1

CMP C2 H F3 O2



RN 691890-96-7 CAFLUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

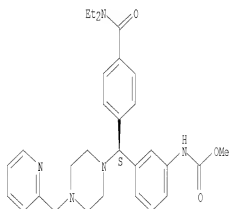
CM 1

CRN 691890-62-7

CMP C30 H57 N5 O3

Absolute stereochemistry. Rotation (+).

Print selected from 10541636.trn



CM 2

CRM 76-05-1

CMF C2 H F3 O2



RN 691890-97-8 CASUS

CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

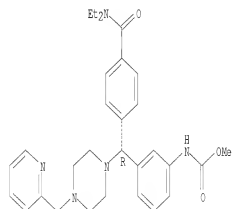
CM 1

CRM 691890-63-8

CMF C30 H37 N5 O3

Absolute stereochemistry. Rotation (-).

Print selected from 10541636.trn



CM 2

CRM 76-05-1

CMF C2 H F3 O2



RN 691890-98-9 CASUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

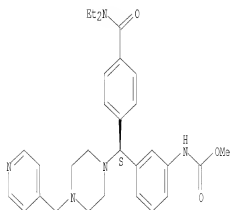
CM 1

CRM 691890-64-9

CMF C30 H37 N5 O3

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn



CM 2

CRW 76-05-1

CMP C2 H F3 O2



RN 691890-99-0 CAELUS

CM Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(4-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, trifluoroacetate (5:13) (9CI) (CA INDEX NAME)

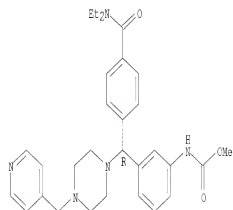
CM 1

CRW 691890-65-0

CMP C30 H37 N5 O3

Absolute stereochemistry. Rotation (-).

Print selected from 10541656.trn



CM 2

CRW 76-05-1

CMP C2 H F3 O2

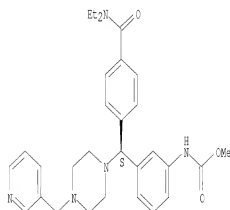


RN 691891-00-6 CAELUS

CM Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(4-pyridinylmethyl)-1-piperazinylmethyl]phenyl]-, methyl ester, hydrochloride (10:29) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Print selected from 10541656.trn

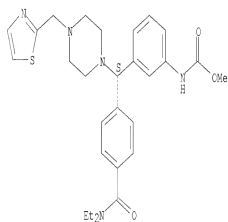


●29/10 HCl

RN 691891-01-7 CASUS

CN Carbamic acid, [3-[(S)-[4-[(diethylamino)carbonyl]phenyl][4-(2-thiazolylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, hydrochloride (2:3) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



●3/2 HCl

RN 691891-02-8 CASUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(4-thiazolylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (3:1) (9CI) (CA INDEX NAME)

CN 1

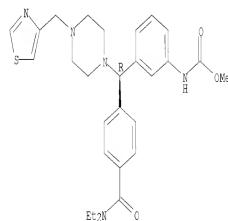
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CRN 691890-70-7

CMF C28 H35 N5 O3 S

Absolute stereochemistry. Rotation (-).



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691891-03-9 CASUS

CN Carbamic acid, [3-[(R)-[4-[(diethylamino)carbonyl]phenyl][4-(3-furazylmethyl)-1-piperazinyl]methyl]phenyl]-, methyl ester, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

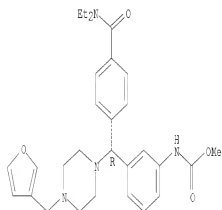
CRN 691890-60-5

CMF C29 H36 N4 O4

Absolute stereochemistry. Rotation (-).

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CN 2

CRN 76-05-1
CMF C2 H F3 O2



=> d his

(FILE 'HMMF' ENTERED AT 17:21:21 ON 14 APR 2008)

FILE 'REGISTRY' ENTERED AT 17:21:42 ON 14 APR 2008

11 STRUCTURE UPLOADED
12 QUE L1
13 50 S L1
14 8171 S L1 FULL
15 0 S PIPERIDINE/RSD
16 1 S PIPERIDINE/CN
17 0 S 46.156.1
18 1326576 S 46.156.1/RID
19 1 S PIPERAZINE/CN
110 0 S 46.393.1
111 1011064 S 46.393.1/RID
112 336 S L8 AND L4
113 401 S L11 AND L4

FILE 'CAPLUS' ENTERED AT 17:23:52 ON 14 APR 2008

114 96 S L12
115 57 S L13

Page 631

Print selected from 10541656.trn

L16 7 S L12 AND OPIOID
L17 3 S L15 AND OPIOID
L18 3 S L17 NOT L16

=> FIL STINGUIDE

FILE 'STINGUIDE' ENTERED AT 17:28:11 ON 14 APR 2008
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